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# USE OF CREDIBLE EVIDENCE TO PROVE CLEAN AIR ACT VIOLATIONS

*Paul D. Hoburg\**

## INTRODUCTION

This paper explores the credible evidence rule promulgated by the U.S. Environmental Protection Agency (EPA) on February 24, 1997.<sup>1</sup> This new rule essentially provides that "any credible evidence" may be used for enforcement and compliance certification purposes under various provisions of the Clean Air Act (CAA)<sup>2</sup> and its implementing regulations,<sup>3</sup> and clarifies that parties are not limited to the use of approved reference test methods.<sup>4</sup>

The rule itself is only a page in length, short by standards of CAA rulemaking.<sup>5</sup> According to EPA, it "merely addresses an evidentiary issue" and is simply intended to clarify existing law that non-reference test data may be used for enforcement and compliance certification.<sup>6</sup> Despite this modest characterization, the rule has generated a firestorm of controversy. Industry strongly favors the exclusive use of detailed reference methods to judge emissions. It believes the new rule will introduce tremendous uncertainty into the enforcement arena and contends that the rule will increase the stringency of many emission limits.<sup>7</sup> During the protracted rulemaking process, EPA re-

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<sup>1</sup> Credible Evidence Revisions, 62 Fed. Reg. 8314 (1997).

<sup>2</sup> 42 U.S.C. § 7401 (1994).

<sup>3</sup> See generally Title 40, Code of Federal Regulations.

<sup>4</sup> See, e.g., 40 C.F.R. § 60, app. A. (1997). Reference test methods are generic multi-use protocols that measure whether a source's emissions comply with numeric performance standards.

<sup>5</sup> The preamble to the rule is 14 pages.

<sup>6</sup> Credible Evidence Revisions, 62 Fed. Reg. 8314.

<sup>7</sup> *Id.* at 8317-19.

ceived more than 800 comments from outside parties,<sup>8</sup> the vast majority of which were from industry representatives objecting to the proposed rule.<sup>9</sup> Since the rule was published in February 1997, industry has filed ninety-six petitions for review with the United States Court of Appeals for the District of Columbia.<sup>10</sup> These petitions have been consolidated under the lead cases, *Clean Air Implementation Project v. EPA*, and *Appalachian Power Co. v. EPA*,<sup>11</sup> which are currently pending.

To set the stage for the current controversy, this paper begins with a discussion of the history of the credible evidence rulemaking and of reference methods in general. It then covers the final rule itself and EPA's concept of what constitutes "credible evidence." Next, it explores the major issues surrounding this rulemaking. Finally, it looks to the future—to the role of credible evidence under the recently promulgated Compliance Assurance Monitoring (CAM) rule<sup>12</sup> and to the current court challenges to the credible evidence rule.

## I. HISTORY OF THE CREDIBLE EVIDENCE RULEMAKING

### A. *Pre-1990 Clean Air Act*

Prior to 1990, CAA section 113(a)<sup>13</sup> authorized EPA to bring an enforcement action "on the basis of any information available to the Administrator" that a person was in violation of a specified provision of the Act.<sup>14</sup> According to EPA, this broad language authorized it to use any information to prove CAA violations, not just the federally approved reference testing methods specified in the Code of Federal

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<sup>8</sup> EPA Public Docket No. A-91-52. This docket is available for public review at EPA Air and Radiation Docket and Information Center, Room M-1500, Waterside Mall, 401 M Street SW, Washington, DC 20460.

<sup>9</sup> "The ACE (any credible evidence) Proposal is a recipe for chaos, gridlock, protracted litigation, and nonproductive waste of resources." Comment by Ohio Chamber of Commerce, EPA Public Docket No. A-91-52, Item No. IVD778.

<sup>10</sup> Under Clean Air Act section 307(b)(1), judicial review of a nationally applicable final action is available only by the filing of a petition for review in the United States Court of Appeals for the District of Columbia Circuit within 60 days of when the rule is published. Under section 307(b)(2), the rule may not be challenged in subsequent civil or criminal enforcement proceedings brought by EPA.

<sup>11</sup> *Clean Air Implementation Project v. EPA*, Appeal Docketed, No. 97-1117 (D.C. Cir. 1997); *Appalachian Power Co. v. EPA*, Appeal Docketed, No. 97-1121 (D.C. Cir. 1997).

<sup>12</sup> See Compliance Assurance Monitoring, 62 Fed. Reg. 54,900 (1997).

<sup>13</sup> 42 U.S.C. § 7413(a) (1994).

<sup>14</sup> Section 113(a) (Federal Enforcement) with its "any information available" language, was first added to the Clean Air Act as section 4(a) of the Clean Air Act Amendments of 1970. See Pub. L. No. 91604, 84 Stat. 1676 (1970).

Regulations (C.F.R.).<sup>15</sup> In *United States v. Kaiser Steel Corp.*, however, a federal district court ruled that compliance with an emission limit had to be determined using the corresponding reference method.<sup>16</sup> In this case, Kaiser Steel's blast furnace was subject to the federal visible emissions (i.e., opacity) limit set forth in a local air quality regulation approved by EPA as part of California's state implementation plan (SIP) required by CAA section 110.<sup>17</sup> This regulation essentially prohibited discharges into the atmosphere of a certain duration which were as dark or darker in shade than that designated as No. 1 on the Ringleman chart.<sup>18</sup> The court ruled that compliance with the emissions limit had to be determined in accordance with procedures specified in 40 C.F.R. part 60, Appendix A, Method 9<sup>19</sup> or any method subsequently established by an appellate court or EPA.<sup>20</sup>

Interestingly, *Kaiser Steel* did not discuss the "any information available" language of CAA section 113(a). EPA recently described the court's rationale for mandating use of reference method as "what [the court] perceived to be limitations in EPA's regulations."<sup>21</sup> However, such a rationale is not apparent from the text of the court's opinion. Under a heading of "Miscellaneous Provisions," the opinion simply directed the use of Method 9, without providing any explanation.

### B. Clean Air Act Amendments (CAAA) of 1990

Under Title VII of the 1990 Clean Air Act Amendments (CAAA) (Provisions Relating to Enforcement), Congress retained the "any information available language" of prior versions of the CAA,<sup>22</sup> and added two other provisions that directly relate to the subsequent credible evidence rulemaking.<sup>23</sup> First, Congress completely revised

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<sup>15</sup> U.S. EPA, THE USE OF INFORMATION OTHER THAN REFERENCE TEST RESULTS FOR DETERMINING COMPLIANCE WITH THE CLEAN AIR ACT (1996) [hereinafter WHITE PAPER].

<sup>16</sup> *United States v. Kaiser Steel Corp.*, No. CV-82-2623, 1984 WL 18669 (C.D. Cal. 1984).

<sup>17</sup> 42 U.S.C. § 7410.

<sup>18</sup> A Ringleman chart is used to regulate visible smoke emissions by a visual comparison of smoke density in daylight. The number five represents completely black smoke, and the number one represents twenty percent black (light grey). ARNOLD W. REITZE, JR., AIR POLLUTION LAW 25 (1995).

<sup>19</sup> Method 9 is EPA's opacity reference test method. 40 C.F.R. § 60, appen. A. Method 9 (1997). It essentially entails a visual observation of the plume or stack by a qualified observer. *Id.*

<sup>20</sup> *Kaiser Steel*, 1984 WL 18669, at \*4.

<sup>21</sup> WHITE PAPER, *supra* note 15.

<sup>22</sup> 42 U.S.C. § 7413(a).

<sup>23</sup> Pub. L. No. 101-549, 104 Stat. 2399, 2672 (1990) (codified as amended at 42 U.S.C. § 7413 (1994)).

CAA section 113(e).<sup>24</sup> This section was originally added to the CAA under the Steel Industry Compliance Extension Act of 1981, which authorized a time extension for the steel industry to comply with certain emission limitation requirements.<sup>25</sup> The 1990 CAAA eliminated this provision. Congress redesignated section 113(e) as "Penalty Assessment Criteria" and, in section 113(e)(1), listed several factors for EPA and courts to consider in determining the amount of any penalty to be assessed under sections 113<sup>26</sup> or 304<sup>27</sup> (the citizen suit provision). One of the factors listed was, "the duration of the violation as established by any credible evidence (including evidence other than the applicable test method)."<sup>28</sup> The legislative history for section 113(e) is conflicting.<sup>29</sup> Nonetheless, it clearly contains support for the view that Congress intended to overturn *Kaiser Steel*<sup>30</sup> by clarifying that, in an enforcement action, courts are not restricted to

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<sup>24</sup> *Id.* at 2679.

<sup>25</sup> Pub. L. No. 97-23, 95 Stat. 139 (1981).

<sup>26</sup> 42 U.S.C. § 7413(e).

<sup>27</sup> 42 U.S.C. § 7604.

<sup>28</sup> The revised section 113(e) reads as follows:

Penalty assessment criteria.

(1) In determining the amount of any penalty to be assessed under this section or section 7406(a) of this title, the Administrator or the court, as appropriate, shall take into consideration (in addition to such other factors as justice may require) the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, *the duration of the violation as established by any credible evidence (including evidence other than the applicable test method)*, payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation. The court shall not assess penalties for noncompliance with administrative subpoenas under section 7607(a) of this title, or actions under section 7414 of this title, where the violator had sufficient cause to violate or fail or refuse to comply with such subpoena or action.

(2) A penalty may be assessed for each day of violation. For purposes of determining the number of days of violation for which a penalty may be assessed under subsection (b) or (d)(1) of this section, or section 7604(a) of this title, or an assessment may be made under section 7420 of this title, where the Administrator or an air pollution control agency has notified the source of the violation, and the plaintiff makes a prima facie showing that the conduct or events giving rise to the violation are likely to have continued or recurred past the date of notice, the days of violation shall be presumed to include the date of such notice and each and every day thereafter until the violator establishes that continuous compliance has been achieved, except to the extent that the violator can prove by a preponderance of the evidence that there were intervening days during which no violation occurred or that the violation was not continuing in nature.

42 U.S.C. § 7413(e) (emphasis added).

<sup>29</sup> This point is discussed further in the section of this paper addressing major issues associated with the credible evidence rule.

<sup>30</sup> *United States v. Kaiser Steel*, No. CV-82-2623, 1984 WL 18669 (C.D. Cal. 1984).

reference test data and may consider any evidence of violation or compliance admissible under relevant evidentiary rules.<sup>31</sup>

Title VII also amended CAA section 114(a) by adding a subsection 114(a)(3) which required major stationary sources<sup>32</sup> to institute "enhanced monitoring"<sup>33</sup> and submit compliance certifications indicating, inter alia, whether compliance is continuous or intermittent.<sup>34</sup> This provision required EPA to promulgate implementing regulations within two years after the enactment of the 1990 CAAA.<sup>35</sup> As discussed below, the credible evidence rule was initially developed as part of the enhanced monitoring program proposed by EPA pursuant to this requirement.<sup>36</sup>

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<sup>31</sup> The report of the Senate Committee on Environment and Public Works (Senate Committee Report) states:

Finally, the amendment clarifies that courts may consider any evidence of violation or compliance admissible under the Federal Rules of Evidence, and that they are not limited to consideration of evidence that is based solely on the applicable test method in the State implementation (sic) [plan] or regulation. For example, courts may consider evidence from continuous emission monitoring systems, expert testimony, and bypassing and control equipment malfunctions, even if these are not the applicable test methods. Thus, this amendment overrules the ruling in *United States v. Kaiser Steel Corp.* . . . to the extent that the court in that case excluded the consideration of such evidence.

S. REP. NO. 101-228, at 366 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3749.

<sup>32</sup> CAA section 302(j) generally defines "major stationary source" as any stationary facility or source of air pollutants which directly emits, or has the potential to emit, 100 tons per year (tpy) or more of any air pollutant as determined by EPA. 42 U.S.C. § 7602(j). Other sections of the CAA specify lower thresholds for certain more heavily polluted areas. For example, CAA section 182(d), addressing severe ozone nonattainment areas, defines a major stationary source as one which emits or has the potential to emit 25 tpy of volatile organic compounds. *See* 42 U.S.C. § 7511a(d).

<sup>33</sup> The 1990 CAAA did not define this term.

<sup>34</sup> 42 U.S.C. § 7414(a) (1994), *as amended by* 1990 CAAA, section 702(b), entitled "Monitoring and Compliance Certifications."

<sup>35</sup> Section 114(a)(3) states:

The Administrator shall in the case of any person which is the owner or operator of a major stationary source, and may, in the case of any other person, require enhanced monitoring and submission of compliance certifications. Compliance certifications shall include (A) identification of the applicable requirement that is the basis of the certification, (B) the method used for determining the compliance status of the source, (C) the compliance status, (D) whether compliance is continuous or intermittent, (E) such other facts as the Administrator may require. Compliance certifications and monitoring data shall be subject to subsection (c) of this section. Submission of a compliance certification shall in no way limit the Administrator's authorities to investigate or otherwise implement this Act. The Administrator shall promulgate rules to provide guidance and to implement this paragraph within 2 years after November 15, 1990.

42 U.S.C. § 7414(a)(3).

<sup>36</sup> Enhanced Monitoring Program, 58 Fed. Reg. 54,648 (1993).

### C. *The 1993 Enhanced Monitoring Rule*

EPA's first attempt to implement CAA sections 113(e) and 114(a)(3) came in October 1993 with its proposed "Enhanced Monitoring Program" rule.<sup>37</sup> A complete discussion of enhanced monitoring is beyond the scope of this paper, but a short summary provides context for the subsequent credible evidence rule. The purpose of enhanced monitoring is to increase overall compliance with applicable emission limitations or standards.<sup>38</sup> The basic concept is to require an owner or operator of (i) any source of hazardous air pollutants subject to existing national emission standards for hazardous air pollutants (NESHAP)<sup>39</sup> and (ii) any major stationary sources of nonhazardous air pollutants to conduct enhanced monitoring<sup>40</sup> at significant emissions units.<sup>41</sup> This monitoring is to be based on enhanced monitoring protocols<sup>42</sup> developed and proposed by the owner or operator for approval by the permitting authority.<sup>43</sup>

Pursuant to CAA section 114(a)(3),<sup>44</sup> the proposed rule allowed a source to use enhanced monitoring data to certify whether it was in continuous or intermittent compliance with applicable emission limitations or standards.<sup>45</sup> EPA envisioned that a wide array of systems and procedures could be used for enhanced monitoring.<sup>46</sup> The main criterion was that an approved protocol facilitate the collection of data

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<sup>37</sup> *Id.*

<sup>38</sup> *Id.* at 54,658.

<sup>39</sup> In accordance with CAA § 112, 42 U.S.C. § 7412. Regulations for the NESHAP program are set forth at 40 C.F.R. § 61 (1997).

<sup>40</sup> The proposed regulation defined this term as, "the methodology used . . . to detect deviations [from an applicable emission limitation or standard] with sufficient representativeness, accuracy, precision, reliability, frequency and timeliness in order to determine if compliance is continuous during a reporting period." Enhanced Monitoring Program, 58 Fed. Reg. at 54,685.

<sup>41</sup> *Id.* "Any part . . . of a source that emits or has the potential to emit any regulated air pollutant for which an emission limitation or standard has been established." *Id.*

<sup>42</sup> *Id.* "[T]he methodology, and all installation, equipment, performance, operation and quality assurance requirements . . . for the purpose of conducting enhanced monitoring." *Id.*

<sup>43</sup> *See id.* (referring to EPA or state agency authorized to manage a permit program under part C (Prevention of Significant Deterioration of Air Quality) or part D (Plan Requirements for Nonattainment Areas) of CAA, Subchapter I or under CAA, Subchapter V (Permits)).

<sup>44</sup> *See* 42 U.S.C. § 7414(a)(3) (1994).

<sup>45</sup> *See* Enhanced Monitoring Program, 58 Fed. Reg. at 54,659.

<sup>46</sup> For example, an enhanced monitoring protocol could be based on:

[C]ontinuous emission monitoring systems; continuous process or control device parameter monitoring systems or procedures; emission calculations based on accepted engineering estimation techniques; maintenance and analysis of records of fuel or raw materials usage; periodic verification of emissions, process parameters or control device parameters using portable or *in situ* measurement devices; recording results of a program or protocol to conduct specific operation and maintenance procedures, leak

adequate to certify compliance.<sup>47</sup> The proposed rule also expressly stated that enhanced monitoring protocols were not limited to existing reference test methods.<sup>48</sup> It changed language in the C.F.R. that potentially required compliance determinations to be made using reference method procedures.<sup>49</sup>

In addition, and most germane to the current credible evidence rulemaking, the enhanced monitoring rule proposed significant changes to CAA enforcement. Specifically, it revised various sections of the C.F.R. to provide that data from enhanced monitoring, along with any other credible evidence, could be used to establish emission violations.<sup>50</sup> The preamble to the enhanced monitoring rule cited CAA sections 113(a) and 113(e)<sup>51</sup> and the legislative history for sections 113(e)<sup>52</sup> and 114(a)(3)<sup>53</sup> as authority for use of non-reference method data as evidence in enforcement proceedings.<sup>54</sup>

Under the 1993 enhanced monitoring proposal, any information could potentially be deemed credible evidence relevant in an enforce-

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detection, fugitive dust control, or other practices; any other form of measuring emissions, process parameters or control device parameters that can achieve the requirements of the proposed regulation or any combination of the above.

*Id.* at 54,656.

<sup>47</sup> *See id.* at 54,659.

<sup>48</sup> *See id.*

<sup>49</sup> The preamble to the enhanced monitoring rule stated:

To be effective, [the enhanced monitoring] program must also be practical and cost-effective for both the regulated community and the regulatory agencies at the local, State, and Federal level. EPA realizes that, because many existing reference test methods require expensive in-stack sampling techniques, it would often be impractical to require a source to conduct such tests frequently enough to have representative data with which to determine and certify its compliance status over a period of time. However, some existing provisions in 40 CFR parts 51, 52, 60, and 61, and in some SIP's, are written in a manner that potentially limits determinations of compliance to such reference method test procedures. To implement the new statutory mandate [CAA section 114(a)(3)] effectively, the existing provisions must be modified to allow explicitly for the enhanced monitoring and compliance certification requirements to be implemented through 40 CFR parts 64 and 70.

*Id.* at 54,659-60.

<sup>50</sup> Enhanced Monitoring Program, 58 Fed. Reg. at 54,659-60. The proposed rule would have revised 40 C.F.R. §§ 51, 52, 60, and 61. *See id.*

<sup>51</sup> 42 U.S.C. § 7413(a),(e) (1994).

<sup>52</sup> S. REP. NO. 101-228, at 358 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3741, discussed *supra* at note 30.

<sup>53</sup> 42 U.S.C. § 7414(a)(3). The Senate Committee Report for this section states that "similar to the reporting requirements of the Clean Water Act . . . compliance certifications and emission data submitted pursuant to this authority will facilitate enforcement, due in part to the fact that such data and certifications can be used as evidence." S. REP. NO. 101-228, at 368 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3751.

<sup>54</sup> *See* Enhanced Monitoring Program, 58 Fed. Reg. at 54,659-60.



ment proceeding. However, data from certain approved testing and monitoring methods was considered "presumptively credible evidence" and created a rebuttable presumption that a violation did or did not occur.<sup>55</sup> These methods included (i) enhanced monitoring protocols developed under the proposed rule, (ii) monitoring or testing methods contained in a federally enforceable permit, including both operating permits under 40 C.F.R. part 70 and preconstruction permits under CAA, title I, part C or D, (iii) compliance test methods (i.e., reference methods) established throughout 40 C.F.R. Part 60 (relating to new source performance standards), and (iv) compliance test methods adopted in a SIP.<sup>56</sup> The 1993 proposal also listed certain presumptively credible monitoring methods.<sup>57</sup> Despite the designation, there was no presumption that data from these methods established violations of an emission limit or standard. Instead EPA or another enforcement agency would have the burden to show that data from such methods is credible evidence of a violation.<sup>58</sup>

EPA released its proposed enhanced monitoring rule in October 1993.<sup>59</sup> Over the next eighteen months, it received extensive public comments on both the enhanced monitoring and credible evidence aspects of the rule.<sup>60</sup> Industry was very critical of the proposal. In particular, it objected to the link between enhanced monitoring and enforcement and to the use of non-reference method data for enforcement purposes, which it believed increased the stringency of underlying emission standards.<sup>61</sup> In April 1995, EPA announced it was suspending development of the enhanced monitoring rule while it developed an alternate approach, called compliance assurance monitoring, intended to meet the same statutory goals.<sup>62</sup>

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<sup>55</sup> *Id.* at 54,676.

<sup>56</sup> *See id.*

<sup>57</sup> *See id.*

<sup>58</sup> *See id.* Note that the current credible evidence rule eliminated the concepts of "presumptively credible evidence" and "presumptively credible monitoring methods" based on public comments suggesting that they were potentially confusing and unnecessary. Credible Evidence Revisions, 62 Fed. Reg. 8314, 8316 (1997).

<sup>59</sup> Enhanced Monitoring Program, 58 Fed. Reg. at 54,648.

<sup>60</sup> *See* Credible Evidence Revisions, 62 Fed. Reg. at 8315.

<sup>61</sup> *See generally* comments contained in EPA Public Docket No. A-91-52, Item No. IV-D-242. The comments of the Clean Air Implementation Project, an industry coalition group represented by the law firm of Morgan, Lewis, & Bockus, contain a comprehensive summary of the concerns raised.

<sup>62</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8315.

*D. Other Developments Preceding the Current Credible Evidence Rule*

In *Sierra Club v. Public Service Co.* (hereinafter *PSC*), decided in July 1995, a federal district court in Colorado upheld a citizen-suit plaintiff's use of non-reference test data to prove an emissions violation.<sup>63</sup> The Sierra Club alleged that the defendant utility company's fossil fuel-fired steam generating facility released visible emissions in excess of the twenty percent opacity standard found in regulations incorporated into Colorado's SIP.<sup>64</sup> The Sierra Club's evidence was publicly available data and reports from continuous emissions opacity monitors (COMs) located at the defendant's facility as required by Colorado emissions control regulations.<sup>65</sup> These COMs had accurately recorded over 19,000 opacity violations during the preceding five years.<sup>66</sup> The utility company nonetheless contended that opacity violations could only be established through a Method 9 visual observation, the reference testing method specified in Colorado's SIP.<sup>67</sup> In support of its position, the utility company cited a 1986 EPA guidance document which stated that the:

legal requirement [for measuring emissions] must specify CEMS [continuous emissions monitoring systems] as the Compliance Method in order for EPA to rely on CEMS data alone to refer a case to . . . (DOJ), to prove a violation . . . in Federal district court, or to issue a Notice of Noncompliance . . . under § 120.<sup>68</sup>

The utility company argued that because the legal requirement in the Colorado SIP was Method 9, only Method 9 observations could be used to establish liability for emissions violations.<sup>69</sup>

The *PSC* court rejected this argument and held that the opacity monitoring data and reports were competent evidence of ongoing emissions violations.<sup>70</sup> The court reasoned that COM data was highly reliable from a technical standpoint.<sup>71</sup> It also noted that, under prior

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<sup>63</sup> See generally *Sierra Club v. Public Serv. Co.*, 894 F. Supp. 1455 (D. Colo. 1995) (hereinafter *PSC*).

<sup>64</sup> See *id.* at 1456.

<sup>65</sup> See *id.*

<sup>66</sup> See *id.*

<sup>67</sup> See *id.* at 1458; see also *supra* text accompanying note 19.

<sup>68</sup> *PSC*, 894 F. Supp. at 1458.

<sup>69</sup> *Id.*

<sup>70</sup> See *id.*

<sup>71</sup> See *id.* at 1458–60.

case law, such data may provide conclusive evidence of CAA compliance and therefore that such evidence is also probative of CAA violations.<sup>72</sup> In addition, the court stated that a Method 9 observation must be made by an individual certified by the state and that the observer generally needs access to the source's premises to properly conduct the observation.<sup>73</sup> Since the owner or operator of a stationary source is under no legal duty to permit a representative of a citizen group onto its premises, the court recognized that a source could easily frustrate the enforcement purpose behind the CAA citizen suit provision.<sup>74</sup> The alleged violator could deny the citizen group's observer access to its facilities or allow such access only when it met the emission standards.<sup>75</sup>

The court also rejected the utility company's argument that allowing use of COMs data and reports as evidence of opacity violations constituted judicial amendment of the underlying emissions standard.<sup>76</sup> The court stated that, "[t]he 20% opacity standard is still the 20% opacity standard. Rather, the focus of my analysis under the applicable statutory and regulatory scheme here is evidentiary."<sup>77</sup>

Interestingly, the *PSC* decision does not discuss the "any information available" language of CAA section 113(a). It also makes only passing reference to section 113(e) by stating near the end that, "[t]his holding is *bolstered* by the 1990 amendments to the Clean Air Act which added a new § 113(e), 42 U.S.C. § 7413."<sup>78</sup>

In a separate development, EPA was required to finalize the credible evidence rule by February 1996 pursuant to a settlement agreement with the Sierra Club in an unrelated case.<sup>79</sup> In September 1995, EPA released a draft of its CAM approach.<sup>80</sup> In this document, EPA

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<sup>72</sup> See *id.*

<sup>73</sup> See *PSC*, 894 F. Supp. at 1460.

<sup>74</sup> See *id.*

<sup>75</sup> See *id.*

<sup>76</sup> *Id.*

<sup>77</sup> *Id.* at 1461.

<sup>78</sup> *PSC*, 894 F. Supp. at 1461 (emphasis added). This portion of the decision goes on to recite the text of section 113(e) and the legislative history (see *supra* note 30). In all, the decision devotes only one relatively short paragraph to section 113(e).

<sup>79</sup> See generally *Sierra Club v. Browner*, Nos. 93-124, 93-125, 93-197, 93-564, 1994 WL 750290 at \*1 (D.C. Cir. Sept. 20, 1994). The Sierra Club had sued to force EPA to promulgate various regulations under the 1990 CAAA.

<sup>80</sup> See Compliance Assurance Monitoring Rule, 60 Fed. Reg. 48,679-80 (1995). EPA published a Federal Register notice announcing the availability of the draft CAM rule for public review on the Emission Measurement Technical Information Center Computer Bulletin Board of EPA's Technology Transfer Network. *Id.*

committed to holding further discussions with interested stakeholders before it proceeded to finalize its credible evidence revisions.<sup>81</sup> On March 8, 1996, EPA announced that it would hold a public meeting on credible evidence issues on April 2, 1996.<sup>82</sup> On March 21, 1996, in preparation for this meeting, EPA released a discussion paper entitled, *The Use of Information Other Than Reference Test Results for Determining Compliance with the Clean Air Act* (White Paper).<sup>83</sup> The White Paper summarized EPA's position on various aspects of the credible evidence proposal and specifically rejected industry claims that the rule would increase the stringency of underlying emission standards.<sup>84</sup> EPA did not publish the meeting notice or its White Paper in the Federal Register; instead it simply posted these documents on EPA's electronic bulletin board.<sup>85</sup>

The public meeting was held on April 2, 1996, as scheduled,<sup>86</sup> and, despite the relatively short notice, twenty-three speakers, representing various industry and environmental groups, presented comments.<sup>87</sup> At the end of the meeting, EPA announced that, although the rulemaking docket<sup>88</sup> had officially closed, it would accept additional

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<sup>81</sup> Credible Evidence Rule, 62 Fed. Reg. 8314, 8315 (1997).

<sup>82</sup> See *id.* at 8316.

<sup>83</sup> See *id.*

<sup>84</sup> EPA's position may be summarized by the following statement:

EPA agrees that one effect of the proposed rule would be to increase the probability that a noncomplying facility will be detected . . . To use a simple analogy, *the Agency is not proposing to change the speed limit for vehicles on Federal highways; rather, it is proposing to allow the use of radar guns to more readily detect speeders.*

WHITE PAPER, *supra* note 15 (emphasis added).

<sup>85</sup> A number of commenters have criticized this approach. See, e.g., EPA Public Docket No. A-91-52, Item Nos. IV-D-813 and IV-D-822.

<sup>86</sup> A verbatim transcript appears at EPA Public Docket No. A-91-52, Item No. IV-F-04.

<sup>87</sup> Commenters were also severely critical of the way EPA organized this meeting. For example:

EPA's notice was not designed to reach interested parties, and the procedures for participation in the hearing prevented those that received the notice from registering. Stakeholders wishing to testify on the implications of this policy had ten days to prepare testimony, and those who tried to enroll to speak at the hearing were either turned away by the secretary (who stated that no one had been hired to coordinate the enrollment) or found that EPA was simply not answering the phone. Just four days before the hearing, EPA finally allowed interested parties to enroll to present testimony.

Comments by General Electric Company, May 2, 1996, EPA Public Docket No. A-91-52, Item No. IV-D-818 [hereinafter GE Comments].

<sup>88</sup> EPA used the same rulemaking docket for this action as the 1993 enhanced monitoring program. EPA Public Docket No. A-91-51.

written comments for another thirty days.<sup>89</sup> As a result, EPA received numerous comments beyond those received in conjunction with the aborted 1993 enhanced monitoring rulemaking.<sup>90</sup>

In a case decided on August 7, 1996, *Unitek Environmental Services v. Hawaiian Cement*, another federal district court upheld use of "credible evidence" by a citizen-suit plaintiff to establish a CAA violation.<sup>91</sup> In this case, Unitek sued Hawaiian Cement alleging that it violated the Hawaii SIP and CAA by emitting fugitive dust emissions in excess of the SIP limit of 150 micrograms per cubic meter (150 <mg>g/m<sup>3</sup>) and by failing to take reasonable precautions to prevent this dust from becoming airborne and crossing its property line onto Unitek's property.<sup>92</sup>

At the beginning of its decision, the court stated that, "[u]nder section 113(e) of the CAA, courts may use 'credible evidence' to establish the duration of a [CAA] violation."<sup>93</sup> It then characterized "credible evidence" as a lenient evidentiary standard and concluded that various items of evidence offered by Unitek were indeed credible and thus sufficient to establish a violation.<sup>94</sup> Unitek's evidence included (i) a notice of violation issued by EPA several months earlier based on monitoring data which it directed Hawaiian Cement to provide pursuant to CAA section 114, (ii) Unitek's independent assessment of Hawaiian Cement's monitoring data, (iii) Hawaiian Cement's admission of noncompliance in a permit application, and (iv) results of Hawaiian Cement's computerized modeling of its own emissions.<sup>95</sup> Unlike the *PSC* case, however, the court in *Hawaiian Cement* did not draw any distinction between reference testing methods and other forms of evidence.<sup>96</sup> In fact there is no indication that Hawaiian Cement even raised the issue.<sup>97</sup>

On August 13, 1996, EPA announced that the then current draft of its CAM rule was available for review.<sup>98</sup> This announcement briefly

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<sup>89</sup> Transcript of Credible Evidence Stakeholders' Meeting, April 2, 1996, EPA Public Docket No. A-91-52, Item IV-F-04 at 195.

<sup>90</sup> See, e.g., EPA Public Docket No. A-91-52, Item Nos. IV-D-816 and IV-D-818.

<sup>91</sup> See generally *Unitek Env'tl. Servs. v. Hawaiian Cement*, 27 Env'tl. L. Rep. (Env'tl. L. Inst.) 20,483 (D. Haw. 1996).

<sup>92</sup> See *id.*

<sup>93</sup> *Id.* at 20,484.

<sup>94</sup> See *id.* at 20,484-85.

<sup>95</sup> See *id.*

<sup>96</sup> See generally *id.*; *Sierra Club v. Public Serv. Co.*, 894 F. Supp. 1455 (D. Colo. 1995).

<sup>97</sup> See *Unitek*, 27 Env'tl. L. Rep. (Env'tl. L. Inst.) at 20,484-87. The decision did not cite the 1995 *PSC* case. See *id.* It also did not discuss CAA section 113(a). See *id.*

<sup>98</sup> Compliance Assurance Monitoring, 61 Fed. Reg. 41,991 (1996).

discussed the pending credible evidence rule and noted that EPA was considering eliminating the "presumptively credible evidence" categories contained in the 1993 enhanced monitoring proposal.<sup>99</sup> It also stated that EPA expected to finalize the credible evidence rule prior to completing action on the CAM approach.<sup>100</sup> On September 10, 1996, EPA held a public meeting to discuss the CAM rule. The relationship between the CAM and credible evidence rule was one of the most heavily addressed issues at this meeting, with industry representatives maintaining, *inter alia*, that the two should be considered together.<sup>101</sup>

EPA discussed the proposed credible evidence rule with various interested parties throughout the summer and fall of 1996 and finalized the rule in November 1996.<sup>102</sup> Although EPA did not consider the proposed rule to be a "significant regulatory action" as defined in Executive Order 12,886,<sup>103</sup> it nonetheless submitted the rule to the Office of Management and Budget (OMB) for review.<sup>104</sup> OMB initially questioned whether the rule could be viewed as effectively changing existing emissions standards and, if so, whether it involved costs that should be assessed.<sup>105</sup> From December 1996 through February 1997, EPA officials had several meetings with OMB to explain its position that the rulemaking was only intended to address an evidentiary issue and did not change industry's underlying compliance obligations.<sup>106</sup>

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<sup>99</sup> *Id.* at 41,992.

<sup>100</sup> *See id.*

<sup>101</sup> Summary and Transcript: September 10, 1996 Compliance Assurance Monitoring Public Meeting, December 18, 1996, EPA Public Docket No. A-9152, Item No. IV-E-12. Page two stated, "The key issues with CAM are enforcement-related, especially as it relates to the credible evidence proposal and certain particular provisions in the CAM rule discussed below" (e.g., use of parametric monitoring data for enforcement).

<sup>102</sup> *See, e.g.*, EPA Memorandum, subject: Meeting with Outside Parties Concerning EPA Rulemakings On Credible Evidence and the Enhanced Monitoring and Compliance Certification Provisions in Section 114(a)(3), EPA Public Docket No. A-91-52, Item No. IV-E-10 (Nov. 5, 1996)(summarizing an October 17, 1996, meeting between EPA officials and industry representatives).

<sup>103</sup> Exec. Order No. 12,866, 58 Fed. Reg. 51,735, 51,737 (1993). Under this Order, regulatory actions which the proposing agency determines to be "significant" are subject to Office of Management and Budget (OMB) review. The Order defines "significant regulatory action" as, *inter alia*, one that is likely to result in a rule that may have an annual effect on the economy of \$100 million or more or that raises novel legal or policy issues. *See* 58 Fed. Reg. at 51,738.

<sup>104</sup> *See* Credible Evidence Revisions, 62 Fed. Reg. 8314, 8327 (1997). *See also* Memorandum from Perrin Quarles Associates, Inc., to Charles Garlow (Jan. 29, 1997) (Discussion Draft Assessment of Regulatory Impact Analysis Issues Involving the Proposed Credible Evidence Rulemaking), EPA Public Docket No. A-91-52, Item No. IV-H-02 [hereinafter Perrin Quarles Memorandum].

<sup>105</sup> *See* EPA Public Docket No. A-91-52, Item Nos. IV-H-06, IV-H-10, IV-H-11.

<sup>106</sup> *See id.*

EPA made changes to the proposed rule's preamble in response to OMB recommendations.<sup>107</sup>

In addition to considering the impact of Executive Order 12,886, EPA analyzed whether the Unfunded Mandates Reform Act of 1995,<sup>108</sup> the Regulatory Flexibility Act,<sup>109</sup> the Paperwork Reduction Act,<sup>110</sup> or the Small Business Regulatory Enforcement Act of 1996<sup>111</sup> applied to the credible evidence rulemaking. EPA concluded that none of these statutes were applicable.<sup>112</sup>

EPA issued the final credible evidence rule on February 24, 1997, with an effective date of April 25, 1997.<sup>113</sup> As previously noted, the new rule is under challenge before the United States Court of Appeals for the District of Columbia.<sup>114</sup> The final CAM rule was published on October 22, 1997.<sup>115</sup>

## II. REFERENCE TESTING METHODS

Before examining the new rule itself, a brief discussion of the term "reference testing method" is in order since it appears throughout the credible evidence literature. Title 40, C.F.R. generally defines reference method as any method of sampling and analyzing for an air pollutant prescribed in the applicable part of Title 40 C.F.R. chapter I.<sup>116</sup>

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<sup>107</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8327.

<sup>108</sup> Unfunded Mandates Reform Act of 1995, Pub. L. No. 104-4 (1993).

<sup>109</sup> Regulatory Flexibility Act, 5 U.S.C. §§ 601-612 (1994).

<sup>110</sup> 44 U.S.C. § 3501 (1994).

<sup>111</sup> Small Business Regulatory Enforcement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996).

<sup>112</sup> Credible Evidence Revisions 62 Fed. Reg. 8314, 8327 (1997). *See also* Perrin Quarles Memorandum, *supra* note 104.

<sup>113</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8314.

<sup>114</sup> *See generally* Clean Air Implementation Project v. EPA, Appeal Docketed, No. 97-1117 (D.C. Cir. 1997).

<sup>115</sup> *See* Compliance Assurance Monitoring, 62 Fed. Reg. 54,900 (1997).

<sup>116</sup> Various definitions appear throughout 40 C.F.R. chapter I, e.g.:

- 40 C.F.R. § 60.2 (1997) (for New Source Performance Standards (NSPS)). *Reference method* means any method of sampling and analyzing for an air pollutant as specified in the applicable subpart.

- 40 C.F.R. § 61.02 (1997) (for pre-1990 National Emission Standards for Hazardous Air Pollutants (NESHAPS)). *Reference method* means any method of sampling and analyzing for an air pollutant, as described in appendix B to 40 C.F.R. § 61.

- 40 C.F.R. § 63.2 (1997) (for post-1990 NESHAPS). *Test method* means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of 40 C.F.R. chapter I, test methods incorporated by reference in this part, or methods validated for an application through procedures in Method 301 of appendix A of § 63.

Reference methods are generic multi-use test protocols that measure whether a source's emissions comply with numeric performance standards. Subparts of Title 40, C.F.R. prescribe performance standards for categories of emissions sources.<sup>117</sup> Each standard contains a section called "test methods and procedures" or "compliance determination procedures and methods" which specifies performance tests used to measure whether a source is in compliance.<sup>118</sup> This section identifies (i) the reference method(s) used to measure whether a source is in compliance with the underlying standard and (ii) any special instructions or conditions to be followed when applying a generic reference method to a particular source, such as sampling rates, volumes, or temperatures.<sup>119</sup>

At present, approximately 130 reference methods have been promulgated. They are described in painstaking technical detail in various appendices throughout Title 40 C.F.R. chapter I.<sup>120</sup> Appendix M to 40 C.F.R. part 51 describes reference methods applicable to SIPs. Appendices A, B, and F to 40 C.F.R. part 60 describe reference methods for new stationary sources. Appendix B to 40 C.F.R. part 61 describes reference methods for pre-1990 NESHAPS, and Appendix A to 40 C.F.R. part 63 describes reference methods for post-1990 NESHAPS. The same reference methods are used in connection with many different performance standards.

For example, 40 C.F.R. part 60, subpart Da prescribes performance standards for electric utility steam generating units for which construction commenced after September 16, 1978. Within subpart Da, § 60.42a lists numeric standards for emission of particulate matter,<sup>121</sup> and § 60.48a, paragraph (b) specifies procedures for determining com-

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<sup>117</sup> See, e.g., 40 C.F.R. § 60, appen. A (1997). Within 40 C.F.R. § 60 (new source performance standards) reference tests are initially addressed in subpart A (General Provisions) at sections 60.8 (Performance Tests) and 60.11 (Compliance with Standards and Maintenance Requirements). Specific uses of these tests are then covered in the individual performance standards in the subparts of § 60, beginning with Subpart D.

<sup>118</sup> See 40 C.F.R. § 60, appen. A.

<sup>119</sup> *Id.*

<sup>120</sup> EPA's electronic bulletin board system contains an updated list of all reference methods that have been published in the Federal Register as final rules.

<sup>121</sup> Discharge gases may not contain particulate matter in excess of: (i) 0.03 lb/million Btu heat input derived from the combustion of solid, liquid, or gaseous fuel; (ii) 1% of potential combustion concentration (defined at § 60.41a) when combusting solid fuel; and (iii) 30% of potential combustion concentration when combusting liquid fuel. In addition, discharge gases may not exhibit greater than 20% opacity (six-minute average), except for one six-minute period per hour of not more than 27% opacity. See 40 C.F.R. § 60.42a. Sections 60.43a and 60.44a specify numeric standards for sulfur dioxide and nitrogen oxides, respectively.



pliance. This paragraph refers to several reference methods including Methods 1, 3B, 5, 5B, 9, and 19, and it contains special instructions for applying them to sources covered by subpart Da.<sup>122</sup> Each reference method is then described in detail in 40 C.F.R. part 60 appendix A.<sup>123</sup> Finally, the six test methods are not associated solely with subpart Da. They are cited throughout part 60 in connection with standards for other emissions sources.<sup>124</sup>

EPA regulations require existing sources to conduct tests within a certain period after the effective date of regulations establishing the underlying performance standard.<sup>125</sup> Likewise, new sources must test within a certain period after initial startup.<sup>126</sup> All sources must conduct tests at other times when directed by EPA pursuant to CAA section 114.<sup>127</sup> According to EPA, the use of reference methods can

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<sup>122</sup> Section 60.48a(b) states:

The owner or operator shall determine compliance with the particulate matter standards in § 60.42a as follows:

(1) The dry basis F factor (O<sub>2</sub>) procedures in Method 19 shall be used to compute the emission rate of particulate matter.

(2) For the particulate matter concentration, Method 5 shall be used at affected facilities without wet FGD systems and Method 5B shall be used after [sic] wet FGD systems.

(i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 +/- 14 degrees Celsius (320 +/- 25 degrees Fahrenheit).

(ii) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O<sub>2</sub> concentration. The O<sub>2</sub> samples shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O<sub>2</sub> traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O<sub>2</sub> traverse points. If the grab sampling procedure is used, the O<sub>2</sub> concentration for the run shall be the arithmetic mean of all individual O<sub>2</sub> concentrations at each traverse point.

(3) Method 9 and the procedures in § 60.11 shall be used to determine opacity.

Sections 60.48a (c) and (d) specify equally complex procedures for determining compliance with sulfur dioxide and nitrogen oxide standards, respectively.

<sup>123</sup> These methods are:

- Method 1—Sample and velocity traverses for stationary sources.
- Method 3B—Gas analysis for the determination of emission rate correction factor or excess air.
- Method 5—Determination of particulate emissions from stationary sources.
- Method 5B—Determination of nonsulfuric acid particulate matter from stationary sources.
- Method 9—Visual determination of the opacity of emissions from stationary sources.
- Method 19—Determination of sulfur dioxide removal efficiency and particulate, sulfur dioxide, and nitrogen oxides emission rates.

<sup>124</sup> See, e.g., 40 C.F.R. §§ 60.50(a)–59(a).

<sup>125</sup> See, e.g., 40 C.F.R. § 61.13.

<sup>126</sup> See 40 C.F.R. § 60.8(a).

<sup>127</sup> See 42 U.S.C. § 7414(a)(1)(D) (1994). Under CAA section 114, EPA can require the owner

cost up to \$100,000 and, in some cases, take a week or more to set up and complete.<sup>128</sup>

### III. THE FEBRUARY 1997 CREDIBLE EVIDENCE RULE

The new credible evidence rule revises 40 C.F.R. parts 51, 52, 60 and 61 to permit the use of any credible evidence (i.e., both reference test data and comparable non-reference test data) to prove or disprove CAA violations in enforcement actions.<sup>129</sup> In this regard, the preamble to the new rule states, "[t]hese revisions make clear that enforcement authorities can prosecute actions based exclusively on any credible evidence, without the need to rely on any data from a particular reference test."<sup>130</sup> The rule also allows the use of non-reference test data as a basis for compliance certifications under section 114(a)(3) and Title V<sup>131</sup> of the CAA.<sup>132</sup> Specifically, the credible evidence rule changed the authority citations for parts 51, 52, 60, and 61.<sup>133</sup> It also revised §§ 51.212, 52.12, 52.33, 60.11, and 61.12, as set out below.

#### A. 40 C.F.R. Part 51, § 51.212

Title 40 C.F.R. part 51 prescribes requirements for the preparation, adoption, and submittal of state and federal implementation plans

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or operator of an emission source, on a one-time, periodic, or continuous basis, to sample its emissions in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as EPA shall prescribe. *See id.*

<sup>128</sup> *See* WHITE PAPER, *supra* note 15.

<sup>129</sup> Credible Evidence Revisions, 62 Fed. Reg. 8314 (1997). The rule's preamble characterizes the changes as "minor modifications to existing regulatory provisions." *Id.*

<sup>130</sup> *Id.* at 8316.

<sup>131</sup> The Title V operating permit program (codified at subchapter V of the CAA, 42 U.S.C. §§ 7661-7661f) was added to the CAA as part of the 1990 CAAA amendments, Pub. L. No. 101-549, Title V, 104 Stat. 2399 (1990). In accordance with CAA section 7661c, operating permits issued under Title V set forth various monitoring, compliance certification, and reporting requirements. EPA's implementing regulations are found at 40 C.F.R. § 70.6 (1997).

<sup>132</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8314-15.

<sup>133</sup> *See id.* at 8314. The final rule revised the authority citations as follows:

Part 51—Authority: 42 U.S.C. §§ 7401, 7411, 7412, 7413, 7414, 7470-79, 7501-08, 7601, and 7602. (The previous version cited §§ 7401-7671q.)

Part 52—Authority: 42 U.S.C. 7401 *et seq.* (The previous version cited §§ 7401-7671q.)

Part 60—Authority: 42 U.S.C. §§ 7401, 7411, 7413, 7414, 7416, 7601, and 7602. (The previous version cited §§ 7401, 7411, 7414, 7416, 7429, and 7601.)

Part 61—Authority: 42 U.S.C. §§ 7401, 7411, 7412, 7413, 7414, 7416, 7601, and 7602. (The previous version cited §§ 7401, 7412, 7414, 7416, and 7601.)

*Id.* at 8328. The preamble does not discuss these changes; however, their primary purpose could be to emphasize EPA's view that CAA section 113, 42 U.S.C. § 7413, authorizes the new rule.

under CAA section 110.<sup>134</sup> Section 51.212 requires implementation plans to contain procedures for testing, inspection, enforcement and complaints. The credible evidence rule revised § 51.212(c) to provide that the inclusion in an implementation plan of specified reference test methods does not preclude the use of other credible evidence to ascertain whether a source is in compliance with the implementation plan's emissions limits.<sup>135</sup> Both the rule and preamble make clear that any such evidence must be relevant to whether a source would have been in compliance with applicable requirements if the appropriate reference testing methods had been performed.<sup>136</sup> The new rule left unchanged existing requirements in §§ 51.212(a) and (b) for periodic testing and inspections, and establishment of a system for detecting and investigating violations.<sup>137</sup>

The final rule deleted the lists of "presumptively credible evidence" and "presumptively credible monitoring methods" proposed in the original enhanced monitoring rule.<sup>138</sup> The preamble to the final rule indicates that the decision to delete these lists was based on public comments suggesting that they were confusing and unnecessary.<sup>139</sup>

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<sup>134</sup> 42 U.S.C. § 7410 (1994). Pursuant to CAA section 109, EPA has promulgated national ambient air quality standards (NAAQS) for six criteria pollutants: particulate matter, sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone, and lead. These standards specify the maximum allowable levels of those substances in the ambient air. The primary mechanism for achieving the NAAQS are state implementation plans (SIPs), required by CAA section 110. These plans, which must be approved by EPA, detail how each state intends to attain and maintain the NAAQS for each criteria pollutant within its borders. Once EPA approves a SIP, it becomes enforceable under federal law. Under certain conditions specified in CAA section 110(c), EPA may promulgate federal implementation plans (FIPs) in lieu of SIPs.

<sup>135</sup> The credible evidence rule revised 40 C.F.R. § 51.212(c) to provide:

§ 51.212 Testing, inspection, enforcement, and complaints. . . .

(c) Enforceable test methods for each emission limit specified in the plan. *For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, the plan must not preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been followed.* As an enforceable method, States may use:

(1) Any of the appropriate methods in appendix M to this part, Recommended Test Methods for State Implementation Plans; or

(2) An alternative method following review and approval of that method by the Administrator; or

(3) Any appropriate method in appendix A to 40 CFR part 60.

Credible Evidence Revisions, 62 Fed. Reg. at 8328 (emphasis added). The italicized text denotes language not contained in the prior version of 40 C.F.R. § 51.212(c).

<sup>136</sup> See *id.* at 8316, 8328.

<sup>137</sup> See *id.* at 8316.

<sup>138</sup> See Enhanced Monitoring Program, 58 Fed. Reg. 54,648, 54,682 (1993).

<sup>139</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8316.

B. 40 C.F.R. Part 52, § 52.12

Title 40 C.F.R. part 52 sets forth EPA's approval and promulgation of SIPs. Section 52.12 (contained in subpart A, General Provisions) discusses source surveillance procedures associated with these plans and identifies, in general terms, applicable test procedures. The credible evidence rule revised § 52.12(c) to provide that, for purposes of federal enforcement, any credible evidence may be used to establish whether SIP violations have occurred.<sup>140</sup> Under § 52.12(c), where an EPA-approved SIP specifies a particular reference method for use in the SIP to determine compliance with an emissions limitation, data from that method is the standard for determining relevancy of any other evidence. Likewise, where there are no approved SIP methods, the test methods specified in 40 C.F.R. part 60 will serve as the baseline.<sup>141</sup> As with § 51.212(c), EPA deleted from the final rule the lists of presumptively credible evidence and monitoring methods set out in the enhanced monitoring proposal.<sup>142</sup>

C. 40 C.F.R. Part 52, § 52.33

The credible evidence rule added 40 C.F.R. § 52.33,<sup>143</sup> Compliance Certifications, which allows use of any credible evidence for compli-

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<sup>140</sup> The credible evidence rule revised § 52.12(c) to read as follows:

§ 52.12 Source surveillance

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(c) For purposes of Federal enforcement, the following test procedures and methods shall be used, *provided that for the purpose of establishing whether or not a person has violated or is in violation of any provision of the plan, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed:*

(1) Sources subject to plan provisions which do not specify a test procedure and sources subject to provisions promulgated by the Administrator will be tested by means of the appropriate procedures and methods prescribed in part 60 of this chapter unless otherwise specified in this part.

(2) Sources subject to approved provisions of a plan wherein a test procedure is specified will be tested by the specified procedure.

*Id.* at 8328 (emphasis added). The italicized text denotes language not contained in the prior version of § 52.12(c).

<sup>141</sup> *See id.*

<sup>142</sup> *See* Enhanced Monitoring Program, 58 Fed. Reg. at 54,682.

<sup>143</sup> This section was numbered 52.30 in the original 1993 enhanced monitoring proposal. *See id.* This section number is currently used for an unrelated provision added to the C.F.R. in 1994—Criteria for limiting application of sanctions under section 110m of the Clean Air Act on a statewide basis.

ance certification purposes under state and federal implementation plans.<sup>144</sup> As was the case with the previous provisions, approved reference test methods are the benchmark for determining whether such evidence is considered relevant.<sup>145</sup>

#### D. 40 C.F.R. Part 60, § 60.11

Title 40 C.F.R. part 60 prescribes standards of performance for new stationary sources (also referred to as new source performance standards (NSPS)) as required by CAA section 111.<sup>146</sup> Section 60.11 (in subpart A, General Provisions) states general procedures for determining compliance with performance standards and maintenance requirements. The credible evidence rule made several revisions to § 60.11, each intended to allow any credible evidence to be used to enforce NSPS.<sup>147</sup> First, it revised § 60.11(a) to eliminate language

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<sup>144</sup> The new § 52.33 provides:

§ 52.33 Compliance certifications

(a) For the purpose of submitting compliance certifications, nothing in this part or in a plan promulgated by the Administrator shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.

(b) For all federal implementation plans, paragraph (a) of this section is incorporated into the plan.

Credible Evidence Revisions, 62 Fed. Reg. at 8328.

<sup>145</sup> See *id.*

<sup>146</sup> See 42 U.S.C. § 7411 (1994). CAA section 111(b) required EPA to identify categories of sources which, in its judgment, cause, or contribute significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare. *Id.* at § 7411(b). Section 111(b) further required EPA to promulgate regulations establishing federal standards of performance for new sources within these categories. *Id.* Pursuant to this authority, EPA has promulgated NSPS for approximately 75 categories of sources. These regulations are codified at 40 C.F.R. § 60, subparts Ca through WWW. As previously noted, these regulations prescribe a source's substantive compliance obligations, generally in the form of numeric emissions limitations or standards. See *supra* note 121 and accompanying text. These regulations also identify performance tests used to measure whether a source is in compliance. The performance tests in turn identify applicable reference methods and any special instructions for applying a generic reference method to a particular source. See *supra* notes 122–24 and accompanying text.

<sup>147</sup> The credible evidence rule revised § 60.11 to read as follows:

§ 60.11 Compliance with standards and maintenance requirements.

(a) Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by § 60.8, unless otherwise provided in the applicable standard . . . .

(f) Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or

requiring compliance with NSPS to “be determined *only* by performance tests established by § 60.8.”<sup>148</sup> Second, it added a § 60.11(g) to specify that nothing in § 60.11 precludes the use of any credible evidence for the purposes of submitting compliance certifications or establishing whether a source violated part 60 NSPS.<sup>149</sup> Again, approved reference test methods are the benchmark for determining whether such evidence is considered relevant.<sup>150</sup> Third, it revised § 60.11(f) to clarify that it does not countermand § 60.11 (g).<sup>151</sup>

The final rule deleted the lists of presumptively credible evidence and presumptively credible monitoring methods from the 1993 enhanced monitoring proposal. It also changed several other parts of the 1993 proposal.<sup>152</sup>

#### E. 40 C.F.R. Part 61, § 61.12.

Title 40 C.F.R. part 61 prescribes emission standards for certain sources of NESHAPS designated pursuant to CAA section 112.<sup>153</sup> Section 61.12 (found in subpart A, General Provisions) prescribes

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information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

Credible Evidence Revisions, 62 Fed. Reg. 8328.

<sup>148</sup> Cf. *id.* at 8316 (revising old § 60.11(a)) (emphasis added).

<sup>149</sup> Section 60.11(a) (which states that compliance with NSPS shall be determined in accordance with performance tests established by § 60.8) is expressly not applicable to opacity standards. Nonetheless, § 60.11(g) provides that the credible evidence rule applies to all part 60 NSPS, including opacity standards. *Id.* at 8317.

<sup>150</sup> See *id.* at 8316–17.

<sup>151</sup> See *id.* at 8317.

<sup>152</sup> The first sentence in the final version of § 60.11(a) was modified from the 1993 enhanced monitoring proposal. EPA adopted mandatory phrasing (“Compliance with standards . . . shall be determined in accordance with the applicable performance tests . . .”) as included in the existing regulation, instead of the permissive phrasing in the 1993 proposal (“Compliance with standards . . . may be determined by performance tests . . .”). The rationale for retaining the mandatory language was to emphasize the role of established reference testing methods as the benchmark for evaluating other forms of evidence. For similar reasons, the final version of § 60.11(g) was changed to underscore the role of reference testing methods. Based on these two changes, the final rule then deleted certain other portions of the 1993 proposal as unnecessary. See Credible Evidence Revisions, 62 Fed. Reg. at 8317.

<sup>153</sup> 42 U.S.C. § 7412 (1994). The pre-1990 version of CAA section 112 authorized EPA to publish a list of hazardous air pollutants and to issue regulations establishing appropriate emissions standards. Under this authority, EPA designated eight substances as hazardous air pollutants and promulgated emissions standards for a limited number of source categories set forth at 40 C.F.R. § 61—National Emission Standards for Hazardous Air Pollutants. As with emissions standards promulgated under § 52 and § 60, the § 61 NESHAPS prescribe a source’s substantive compliance obligations, generally in the form of numerical emissions limitations or standards. These regulations also identify performance tests used to measure whether a source is in

general procedures for complying with the numerical emission limits of part 61. The credible evidence rule added a § 61.12(e) to specify that nothing in part 61 precludes the use of any credible evidence for submitting compliance certifications or establishing whether a source violated a part 61 NESHAP.<sup>154</sup> Approved reference test methods are again the benchmark for determining whether such evidence is considered relevant.<sup>155</sup> The final rule also deleted lists of presumptively

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compliance. The performance tests in turn identify applicable reference testing methods. *See e.g.*, 40 C.F.R. § 61, subpart F—National Emissions Standard for Vinyl Chloride.

The 1990 CAAA greatly expanded the hazardous air pollutant program. CAA section 112(b)(1) now lists 189 hazardous air pollutants. *See* 42 U.S.C. § 7412(b)(1). Section 112(b)(2) authorizes EPA to add pollutants “which present, or may present . . . a threat of adverse human health effects.” *See id.* at § 7412(b)(2). Section 112(c) requires EPA to publish a list of all categories of major sources (defined in section 112(a)(1) as stationary sources that emit or have the potential to emit 10 tons per year (tpy) of any hazardous air pollutant or 25 tpy of any combination of hazardous air pollutants) and area sources (defined in section 112(a)(2) as any stationary source of hazardous air pollutants that is not a major source) for the air pollutants listed pursuant to subsection (b). *See id.* at § 7412(c)(1). Section 112(d) then requires EPA to promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources listed pursuant to subsection (c). *See id.* at § 7412(d)(1).

EPA's regulations establishing emissions standards for post-1990 NESHAPS are found at 40 C.F.R. § 63—National Emission Standards for Hazardous Air Pollutants for Source Categories. *See* 40 C.F.R. § 63 (1997). 40 C.F.R. § 63 prescribes emissions standards for substances designated as hazardous air pollutants by the 1990 CAAA. *See id.* As with the § 61 standards, the § 63 NESHAPS specify numeric performance standards and compliance procedures including designated reference testing methods. *See, e.g.*, 40 C.F.R. § 63, subpart L—National Emission Standards for Coke Oven Batteries. The NESHAPS in § 61 are independent of those in § 63, and the § 61 NESHAPS remain in effect until they are amended and, if appropriate, added to § 63. *See* 40 C.F.R. § 63.1(a)(2).

In what may be an omission, the February 1997 Credible Evidence Rule applies only to § 61 NESHAPS even though the § 63 NESHAPS also clearly contemplate use of reference testing methods to determine compliance. *See generally*, 40 C.F.R. §§ 63.6, 63.7; *see, e.g.*, 40 C.F.R. § 63, subpart GG (National Emission Standards for Aerospace Manufacturing and Rework Facilities); 40 C.F.R. § 63.749 (compliance dates and determinations); 40 C.F.R. § 63.750 (test methods and procedures).

<sup>154</sup> The credible evidence rule revised § 61.12 to read as follows:

§ 60.12 Compliance with standards and maintenance requirements.

(a) Compliance with numerical emission limits shall be determined in accordance with emission tests established in § 61.13 or as otherwise specified in an individual subpart. . . .

(e) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.

Credible Evidence Revisions, 62 Fed. Reg. at 8328.

<sup>155</sup> *See id.*

credible evidence and presumptively credible monitoring methods in the 1993 enhanced monitoring proposal.<sup>156</sup>

### F. SIP Call

As part of the 1993 Enhanced Monitoring Proposal, EPA announced its intent to call for states to amend their SIPs to ensure that owners or operators may use enhanced monitoring for compliance certification purposes and that data from this monitoring, along with any other credible evidence, may be used as evidence of a violation of a SIP.<sup>157</sup> EPA subsequently instructed its regional offices to conduct the SIP call. As of September 1996, fifteen states and local air pollution control districts, along with Puerto Rico, had submitted SIP amendments for EPA approval. At the time the Credible Evidence Rule was issued, five states and Puerto Rico had received approval.<sup>158</sup> The rule's preamble states that EPA has authority to continue this SIP call.<sup>159</sup>

## IV. WHAT IS CREDIBLE EVIDENCE?

Neither CAA section 113(e) nor the new rule itself defines what is encompassed by the term "credible evidence." EPA, however, clearly contemplates use of virtually any information that is relevant and otherwise admissible under applicable federal or state rules of evidence.<sup>160</sup> The rule's preamble mentions various types of information that might constitute credible evidence "including engineering calculations, indirect estimates of emissions, and direct measurement of emissions by a variety of means."<sup>161</sup> It also mentions continuous opac-

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<sup>156</sup> Enhanced Monitoring Program, 58 Fed. Reg. 54,648, 54,684 (1993).

<sup>157</sup> *Id.* at 54,660.

<sup>158</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8327.

<sup>159</sup> The preamble states:

For substantially the same reasons that allow EPA to go forward with today's final rule, EPA has the authority to initiate and continue this SIP call. EPA's decision to forego the enhanced monitoring approach in favor of the CAM proposal has no effect on the basic goals of the SIP call, which are to clarify that non-reference test data can be used in enforcement actions, and to remove any potential ambiguity regarding this data's use for Title V compliance certifications.

*Id.*

<sup>160</sup> See *id.* at 8317. See also WHITE PAPER, *supra* note 15. This approach is consistent with the legislative history for section 113(e), which defines credible evidence as "any evidence of violation or compliance admissible under the Federal Rules of Evidence . . . not limited to . . . evidence that is based solely on the applicable test method in the State implementation (sic) [plan] or regulation." S. REP. NO. 101-228, at 366 (1989), reprinted in 1990 U.S.C.A.N. 3385, 3749. See, e.g., *Sierra Club v. Public Serv. Co.*, 894 F. Supp. 1455, 1461 (D. Colo. 1995) (quoting this legislative history).

<sup>161</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8315.



ity monitor data,<sup>162</sup> continuous emission monitoring (CEM) data and "well-chosen parametric monitoring data, such as the operating temperature and air flow rate of a regenerative thermal oxidizer."<sup>163</sup> In addition, the legislative history for section 113(e) lists "continuous emission monitoring systems, expert testimony, and bypassing and control equipment malfunctions" as examples of the types of evidence which courts may consider.<sup>164</sup> EPA, moreover, has acknowledged that, "[t]he heart of the issue under credible evidence is the intended use of continuous monitoring system (CMS) data to establish that an emissions limitation violation has occurred."<sup>165</sup>

The rule emphasizes that established reference testing methods will continue to play a significant role in the enforcement arena. It states, "[u]nder today's revisions, information generated from an appropriate and properly conducted test method . . . will still generally be the best method for determining a source's compliance during the

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<sup>162</sup> *Id.* at 8317. As the name implies, a continuous opacity monitoring system (COMS) is a method of measuring opacity. A COMS analyzes the opacity of emissions from a source by passing a beam of light from one side of the stack across the exhaust path to a reflector which returns the light to the opacity sensor. The opacity sensor measures the attenuation of light from the stack's emissions. The opacity reading reflects the "degree to which emissions reduce the transmission of light and obscure the view of an object in the background." 40 C.F.R. § 60.2 (1997). *See also* *PSC*, 894 F. Supp. at 1457. COMS is an alternative to Reference Method 9—Visual Determination of the Opacity of Emissions From Stationary Sources, set forth in 40 C.F.R. § 60, appen. A, and discussed at 40 C.F.R. § 60.11. COMS is one type of continuous monitoring system (CMS), defined as equipment used to sample, analyze, and provide a permanent record of emissions or process parameters. *See* 40 C.F.R. § 60.2.

<sup>163</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8315. Continuous emissions monitoring systems (CEMS) are another type of continuous monitoring system (CMS). CEMS sample, analyze, measure, and record information about pollutants on a nearly continual basis. A CEM system is composed of the sampling interface, the gas analyzer, and the data acquisition controller system. While expensive, CEMS are considered to be very reliable. *See* ARNOLD W. REITZE, JR., *AIR POLLUTION LAW* 920-21 (1995); JAMES A. JAHNKE, *CONTINUOUS EMISSION MONITORING* 2-3 (1993) (an extract is included in EPA Public Docket No. A-91-52, Item No. IV-H-03).

Parametric monitoring, in general terms, refers to the technique of monitoring industrial process or control device parameters correlated to emissions as opposed to monitoring the actual emissions themselves. *See* U.S. EPA, *CREDIBLE EVIDENCE REVISIONS: RESPONSE TO COMMENTS* 19-23 (1997); EPA Public Docket No. A-91-52, Item No. V-C-2 (also available from EPA's electronic bulletin board system) [hereinafter *RESPONSE TO COMMENTS*].

<sup>164</sup> S. REP. NO. 101-228, at 366 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3749. *See also* *PSC*, 894 F. Supp. at 1461 (quoting this legislative history).

<sup>165</sup> *See* EPA Memorandum from Air Enforcement Division to Office of Management and Budget, Credible Evidence Rule—Clean Air Act, EPA Public Docket No. A-91-52, Item No. IV-H-06 (January 21, 1997). Attachment A to this memorandum is a paper, stamped "Draft," entitled "Credible Evidence, Compliance Indicators and Prior Agency Statements on the Use/Nonuse of Certain Data for Enforcement Purposes." The quoted language on CMS data appears on the second page of this attachment.

test period.”<sup>166</sup> EPA will continue to “use the reference methods for exactly what they are: test methods of reference against which to compare information generated by means other than the reference tests.”<sup>167</sup> The rule repeatedly stresses that the applicable reference test methods are the benchmark against which the relevancy of all other types of information will be measured.<sup>168</sup>

According to EPA, however, the new rule does not require that the process used to generate non-reference method data be identical to the specified reference test:

There is no need to establish that every test condition specified in a reference test method has been matched by a surrogate condition in the method used to generate the comparable information. Typically, reference test methods (and any additional test conditions specified in individual regulations) quantify the presence of particular physical attributes—for example, mass or concentration of a chemical or group of chemicals—over a specified period of time. As long as these two elements—quantification and specified time period—are retained and the data from the alternate method is related to the reference test, information generated by alternate methods yield data bearing on what the results of a reference test would have been, and the use of such information to establish compliance or noncompliance in an enforcement action will not affect the stringency of the underlying standard. Of course, non-reference data that is already quantified in the same units as the underlying standard, e.g., emissions data generated by properly operating and calibrated non-reference CEMs, should generally be comparable to reference test data, with all specified averaging periods still applying.<sup>169</sup>

## V. EPA'S ENFORCEMENT GUIDANCE

Subsequent to promulgation of the final rule, EPA issued an internal guidance document on the use of credible evidence in its air

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<sup>166</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8317.

<sup>167</sup> *Id.* at 8316.

<sup>168</sup> *See id.* at 8315–17, 8328. The preamble states:

[W]here a SIP, New Source Performance Standard or permit specifies EPA Method 25A . . . for determining the amount of volatile organic compounds (VOCs) that are emitted, the “other evidence” that could establish compliance would have to relate to the likely measurement of VOCs that would be obtained by a Method 25A measurement. This could include, for example, consideration of key operating parameters for the facility as correlated with emissions during a Method 25A test.)

*Id.* at 8316.

<sup>169</sup> *Id.* at 8319. The preamble goes on to discuss an example involving use of a continuous opacity monitor in lieu of reference Method 9, the NSPS reference method for opacity. *See id.*

enforcement program.<sup>170</sup> This document announced five interim implementing measures. First, it expressly withdrew prior EPA policy memorandums which had indicated that CEM data would be used for direct enforcement only when specified as the compliance test method in EPA rules, SIPs, source permits, orders or consent decrees.<sup>171</sup> It also withdrew other prior memorandums to the extent they implied that CEM data was sufficient only to support issuance of a notice of violation versus actually proving a violation of an emission standard.<sup>172</sup>

Second, the guidance document announced that the credible evidence rule does not affect established EPA enforcement policy.<sup>173</sup> It directed that EPA enforcement resources and activities (particularly judicial enforcement activities) continue to focus on significant violations.<sup>174</sup> Minor violations should generally be a lower judicial enforcement priority since administrative tools could be used to address such violations.<sup>175</sup> Third, the guidance document directed expedited processing of SIP revisions to expressly permit the use of credible evidence for enforcement.<sup>176</sup> Fourth, it designated as "nationally significant" all civil proceedings involving credible evidence issues,<sup>177</sup> and instructed EPA's Regional Counsel to review their current cases to determine whether credible evidence issues have been or are likely to be raised.<sup>178</sup> Fifth, the guidance document established a Credible Evidence Work Group to develop additional guidance.<sup>179</sup>

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<sup>170</sup> EPA Memorandum, subject: Interim Policy and Guidance on the Use of "Credible Evidence" in Air Enforcement Activities (April 29, 1997) (on file with author) [hereinafter Enforcement Guidance Memorandum].

<sup>171</sup> *Id.* at 1.

<sup>172</sup> *Id.* at 2.

<sup>173</sup> *Id.*

<sup>174</sup> *Id.* at 3. Accordingly:

[E]nforcement activities should generally be directed at violations that (1) may threaten or result in harm to public health or the environment, (2) are of significant duration or magnitude, (3) represent a pattern of noncompliance, (4) involve a refusal to provide specifically requested compliance information, (5) involve criminal conduct, or (6) allow a source to reap an economic benefit.

<sup>175</sup> Enforcement Guidance Memorandum, *supra* note 170, at 3.

<sup>176</sup> *Id.*

<sup>177</sup> *Id.* at 4. According to the guidance document, cases involving "nationally significant issues" may not be settled without concurrence of EPA's Assistant Administrator for Enforcement and Compliance Assurance. *Id.*

<sup>178</sup> *Id.*

<sup>179</sup> *Id.*

## VI. MAJOR ISSUES

As noted at the outset, the credible evidence rule has generated tremendous controversy.<sup>180</sup> Industry groups have expressed significant concerns over how the rule will affect CAA enforcement, compliance certifications, and, perhaps most importantly, underlying emissions standards.<sup>181</sup> These groups voiced numerous objections throughout the lengthy rulemaking process,<sup>182</sup> and, now that the rule has been finalized, they have mounted a vigorous challenge before the United States Court of Appeals for the District of Columbia.<sup>183</sup> This section of the paper will explore the major issues surrounding the credible evidence debate.

### A. *Use of Credible Evidence in Enforcement Actions*

EPA intended that the new rule facilitate CAA enforcement, by both federal and state government authorities as well as private citizens groups.<sup>184</sup> In discussing the benefits of the new rule, the preamble noted that state regulators and EPA heretofore had to rely on infrequent on-site inspections and even less frequent reference tests in order to check compliance with emission limits.<sup>185</sup> The preamble cited a 1990 General Accounting Office (GAO) report which found that these on-site inspections were performed approximately once a year and that reference tests were typically performed once every five years.<sup>186</sup> The preamble also noted that reference tests may not yield a representative picture of a source's emissions since sources typically schedule and conduct the tests themselves.<sup>187</sup> Finally, it noted that

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<sup>180</sup> See *supra* notes 6-10 and accompanying text.

<sup>181</sup> See Credible Evidence Revisions, 62 Fed. Reg. 8314, 8317 (1997).

<sup>182</sup> As noted *supra* in notes 8-9 and accompanying text, EPA received over 800 comments from outside parties, the vast majority of which were from industry representatives objecting to the proposed rule. See EPA Public Docket No. A-91-52.

<sup>183</sup> See *Clean Air Implementation Project v. EPA*, No. 97-1117 (D.C. Cir. filed Mar. 4, 1997). Under CAA section 307(b), the U.S. Court of Appeals for the D.C. Circuit adjudicates challenges to final EPA rules. Petitions for review must be filed within 60 days of the date that the rule is published. Industry groups have filed 96 petitions for review of the Credible Evidence Rule. These petitions have been consolidated in one case, *Clean Air Implementation Project v. EPA*. See generally *id.*

<sup>184</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8315.

<sup>185</sup> See *id.*

<sup>186</sup> See *id.* (citing GENERAL ACCOUNTING OFFICE, AIR POLLUTION: IMPROVEMENTS NEEDED IN DETECTING AND PREVENTING VIOLATIONS 12, 19 (1990)).

<sup>187</sup> See *id.*

reference tests are costly and time-consuming.<sup>188</sup> According to EPA, the new rule will promote enforcement by allowing the use of other types of information to assess compliance—information that is more readily available and more representative of a source's ongoing operations than reference test data.<sup>189</sup> Also, the rule places both sources and potential enforcers on an equal evidentiary footing since both sides may use non-reference method evidence in an enforcement action.<sup>190</sup>

Industry groups contend that the use of credible evidence would be both unconstitutional and unfair and, in some cases, not scientifically supportable.<sup>191</sup> These groups have also expressed concerns that regulators would use credible evidence to bring enforcement actions for insignificant violations and that the new rule would penalize companies which voluntarily collect data to evaluate and improve performance and assure compliance.<sup>192</sup>

First, industry groups assert that the use of undefined "credible evidence" would violate sources' constitutional right to due process.<sup>193</sup> Their argument is that unless EPA comprehensively identifies the precise types of information that can be used as credible evidence, sources will not have sufficient "fair warning" regarding potential enforcement.<sup>194</sup> In support of this argument, several industry commenters have cited the 1995 decision from the United States Court of Appeals for the District of Columbia in *General Electric Co. v. EPA*.<sup>195</sup>

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<sup>188</sup> See *id.*

<sup>189</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8315.

<sup>190</sup> See *id.*

<sup>191</sup> *Id.* at 8317.

<sup>192</sup> See *id.*

<sup>193</sup> See *id.*

<sup>194</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8317.

<sup>195</sup> See *id.* (citing *General Elec. Co. v. EPA*, 53 F.3d 1324, 1329 (D.C. Cir. 1995)). This case involved solvent which GE used to soak PCB-contaminated electric transformers prior to disposal in a landfill. See *General Elec.*, 53 F.3d at 1326. When the soaking operation was completed, the spent solvent was highly contaminated with PCBs. See *id.* EPA's TSCA regulations required incineration of this contaminated solvent but did not clearly preclude intermediate processing prior to incineration. See *id.* GE developed a highly effective distillation-recycling process that allowed it to recover approximately 90% of the solvent. See *id.* The remaining 10%, which still contained PCBs above the regulatory threshold, was immediately incinerated. EPA interpreted its regulations as prohibiting such intermediate processing, and it imposed a \$25,000 administrative fine on GE for improper disposal of the contaminated solvent. See *id.* at 1326-27. The court found that GE's interpretation of the regulations was more plausible than EPA's; nonetheless, under the principle of deference to the administrative agency charged with enforcing TSCA, it concluded that EPA's interpretation was permissible. See *General Elec.*, 53 F.3d at 1330-31. The court, however, went on to conclude that EPA's interpretation was "so far from a reasonable person's understanding of the regulations that they could not have fairly informed GE of the agency's perspective." See *id.* at 1330. Because these regulations did not provide fair

In the *General Electric* case, EPA fined the General Electric Company (GE) \$25,000 after concluding that it had processed polychlorinated biphenyls (PCBs) in a manner not authorized under EPA's interpretation of its Toxic Substances Control Act (TSCA) regulations.<sup>196</sup> The court concluded that EPA's interpretation of those regulations was permissible, but it vacated the finding of liability and the fine because the regulations were unclear and did not provide GE with fair warning of EPA's interpretation.<sup>197</sup> Here industry commenters argue that EPA's failure to define what constitutes "credible evidence" renders unclear what a source can consider compliance or non-compliance with CAA standards and thereby, as in the *General Electric* case, deprives it of fair warning of grounds for enforcement.<sup>198</sup>

EPA rejects this view. The preamble to the rule also quotes from *General Electric*, stating that fair warning jurisprudence requires that regulated sources have adequate notice of the "standards with which the agency expects parties to conform."<sup>199</sup> EPA maintains that the rule does not deprive industry of fair warning because it does not change underlying emissions standards.<sup>200</sup>

Second, industry claims that using an undefined credible evidence standard in enforcement actions is unfair because sources will not know what evidence may be used against them.<sup>201</sup> EPA disagrees, noting that the issue is no different in CAA enforcement than in any other civil or criminal matter where a wide array of evidence is potentially admissible.<sup>202</sup>

Third, industry has observed the obvious linkage between the credible evidence rule and the proposed CAM rule, which contemplates development of parametric monitoring data.<sup>203</sup> Industry contends that use of non-reference method CAM data for general enforcement purposes is not scientifically supportable.<sup>204</sup> Their argument is that parametric relationships with emissions (i.e., the correlation between certain operating parameters—such as temperature, fuel consumption,

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warning of the enforceable standard, the court ruled that EPA could not apply its interpretation retroactively to hold GE liable for the actions charged. *See id.* at 1333–34.

<sup>196</sup> *General Elec.*, 53 F.3d at 1325.

<sup>197</sup> *Id.*

<sup>198</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8317; RESPONSE TO COMMENTS, *supra* note 163, at 19–23.

<sup>199</sup> *General Elec.*, 53 F.3d at 1329.

<sup>200</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8317.

<sup>201</sup> *Id.*

<sup>202</sup> *Id.*

<sup>203</sup> RESPONSE TO COMMENTS, *supra* note 163, at 19–20.

<sup>204</sup> *Id.*

or the volume of particles trapped in a fabric filter—and emissions) are only reliable for the specific operating ranges over which they were developed and cannot be accurately applied across a source's full operating range.<sup>205</sup> Industry also argues that correlations between a single operating parameter and pollutant emissions are invariably imprecise, and the fact that a parameter is off-specification does not necessarily mean the source is exceeding its emission limits.<sup>206</sup>

EPA readily acknowledges the linkage between the credible evidence and CAM rules.<sup>207</sup> In fact, it anticipates that, at a facility subject to the CAM rule, most data that would be considered as potentially credible evidence of violation would be generated by appropriate, well-designed parametric or emission monitoring, based on a plan submitted by the source itself and approved by the Title V permitting authority.<sup>208</sup> In response to the technical arguments against the credibility of parametric data, EPA points out that established burden of proof rules will continue to apply, and that the party defending against the use of such data may submit evidence that it is unreliable.<sup>209</sup>

Fourth, industry fears that the use of credible evidence in compliance determinations may disclose multiple minor violations for which regulators or citizens will bring lawsuits.<sup>210</sup> EPA, however, does not believe that the rule will lead to a great increase in litigation.<sup>211</sup> It points to its established enforcement policy, explained in the March 1996 White Paper and set forth in the preamble to the new rule.<sup>212</sup> EPA also claims that examination of its recent judicial enforcement history clearly demonstrates that it concentrates its resources on large, significant cases.<sup>213</sup> With regard to citizen suits, EPA points to a 1996 review of Clean Water Act cases and anecdotal experience under the CAA, which indicates that citizen-plaintiffs do not focus on

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<sup>205</sup> *Id.*

<sup>206</sup> *Id.*

<sup>207</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8317–19.

<sup>208</sup> *Id.*

<sup>209</sup> RESPONSE TO COMMENTS, *supra* note 163, at 19–20.

<sup>210</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8317. For example, one commenter noted that the rule had no enforcement or compliance benefits and that its only effect “will be to increase costs and contingent liabilities associated with defending, settling and paying fines in enforcement cases and citizen suits.” Letter from Joe J. Mayhew, Asst. Vice Pres., Chemical Manufacturer's Association, to Robert I. Van Heuvelen, Director of Regulatory Enforcement, U.S. EPA (May 2, 1996) EPA Public Docket A-91-52, Item No. IV-D-823 [hereinafter CMA Letter].

<sup>211</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8318.

<sup>212</sup> See *supra* note 152.

<sup>213</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8318.

minor, sporadic violations.<sup>214</sup> In addition, public interest groups provided comments indicating that they pursue only significant violators due to the cost and difficulty of litigation.<sup>215</sup>

Fifth, industry contends that the new rule will frustrate the ultimate goal of CAA compliance by providing a strong disincentive for companies to voluntarily conduct diagnostic testing or process monitoring since any data so collected could be used against them as "credible evidence" in an enforcement action.<sup>216</sup> Industry contends that the rule would likewise threaten self-auditing programs.<sup>217</sup> EPA rejected these concerns as speculative and noted that it has established policies with respect to self-audits and due diligence programs.<sup>218</sup> Provided the source proactively responds to adverse data to prevent pollution and avoid noncompliance, EPA states that the source "would not present a significant enforcement concern."<sup>219</sup>

### B. *Use of Credible Evidence in Compliance Certifications*

Sections 114(a)(3) and 504<sup>220</sup> of the CAA require major stationary sources<sup>221</sup> to certify compliance with CAA requirements. EPA has indicated that one purpose of the credible evidence rule is, "to remove any potential ambiguity regarding [non-reference test] data's use for compliance certifications under . . . the Act."<sup>222</sup> EPA maintains that this approach will facilitate the compliance certification process and benefit industry by making it easier and less costly for sources to meet certification requirements.<sup>223</sup>

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<sup>214</sup> See *id.*

<sup>215</sup> See *id.* Industry groups have expressed skepticism over such voluntary assurances since neither prosecutors nor citizens groups are legally precluded from bringing enforcement actions for "minor" violations. See, e.g., Letter from G. William Frick, Vice Pres. and General Counsel, American Petroleum Institute, to Steven Viggiani, Air Enforcement Division, U.S. EPA (May 1, 1996), EPA Public Docket A-91-52, Item No. IV-D-822 [hereinafter API Letter].

<sup>216</sup> RESPONSE TO COMMENTS, *supra* note 163, at 98. CMA Letter, *supra* note 210.

<sup>217</sup> RESPONSE TO COMMENTS, *supra* note 163, at 98; CMA Letter, *supra* note 210.

<sup>218</sup> See RESPONSE TO COMMENTS, *supra* note 163, at 98. EPA's self-auditing policy is set forth at Incentive for Self-Policing: Discovery, Disclosure, Correction, and Prevention of Violations, 60 Fed. Reg. 66,706 (1995).

<sup>219</sup> See RESPONSE TO COMMENTS, *supra* note 163, at 98.

<sup>220</sup> 42 U.S.C. §§ 7413(a)(3), 7661(c) (1994). Section 7661(c) is part of the Title V permit program added by the 1990 CAAA, implemented at 40 C.F.R. §§ 70 (State Operating Permit Programs), 71 (Federal Operating Permit Programs) (1997).

<sup>221</sup> See *supra* note 32.

<sup>222</sup> See Credible Evidence Revisions, 62 Fed. Reg. 8314 (1997).

<sup>223</sup> See *id.* at 8315; RESPONSE TO COMMENTS, *supra* note 163, at 98.



Industry commenters contend that the new rule will actually complicate the compliance certification process and create new burdens and uncertainties for sources.<sup>224</sup> They argue that sources previously had to consider only the results of specified reference tests or other compliance certification, testing, and monitoring requirements contained in their operating permits.<sup>225</sup> Under the new rule, however, almost any information becomes potentially relevant to whether a source is in compliance. Sources, therefore, must now undertake a much more exhaustive and burdensome search of their records in order to preclude a false certification.<sup>226</sup> Even then, the argument goes, sources will not know for certain if they have considered all possible information before certifying compliance.<sup>227</sup>

In response, EPA believes that industry is overstating these concerns.<sup>228</sup> In the preamble, EPA indicates that, while a source may not ignore obviously relevant information, the new rule does not require a source to affirmatively search out and review every piece of information in its possession prior to certifying compliance.<sup>229</sup> EPA contends that, consistent with the legislative history behind section 114(a)(3) and Title V, EPA's permit program regulations already contemplate the use of non-reference test data for compliance certification.<sup>230</sup> It reiterates its view that the rule merely eliminates a potential conflict between parts 51, 52, 60 and 61 and the part 70 and 71 permit program regulations regarding use of non-reference test data in compliance certifications and that it does not impose any new requirements on industry.<sup>231</sup> EPA also indicates that sources which now certify compli-

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<sup>224</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8319; RESPONSE TO COMMENTS, *supra* note 163.

<sup>225</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8319; RESPONSE TO COMMENTS, *supra* note 163; see also 40 C.F.R. §§ 70.6(a)(3), 70.6(c), 71.6(a)(3), 71.6(c) (1997).

<sup>226</sup> Section 113(c) of the CAA and 18 U.S.C. § 1001 criminalize false certifications. See 42 U.S.C. § 7413 (1994); 18 U.S.C. § 1001 (1994).

<sup>227</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8319; RESPONSE TO COMMENTS, *supra* note 163.

<sup>228</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8319-20; RESPONSE TO COMMENTS, *supra* note 163.

<sup>229</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8319-20; RESPONSE TO COMMENTS, *supra* note 163; 40 C.F.R. §§ 70.5(d), 71.5(d) (1997) ("reasonable inquiry" standard).

<sup>230</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8319.

<sup>231</sup> See *id.* Notwithstanding EPA's contention, the current permit program regulations at 40 C.F.R. §§ 70 (state), 71 (federal) do not clearly indicate whether sources may use non-reference test data to certify compliance. See 40 C.F.R. §§ 70.6(a)(3)(A), 71.6(a)(3)(A) (Permit content-monitoring and related recordkeeping and reporting requirements). These provisions require that the permit specify "[a]ll emissions monitoring and analysis procedures or test methods required under the applicable requirements." *Id.* However, subsection (a)(3)(B) of these two

ance solely on the basis of continuous reference methods (e.g., COMS) may continue to do so, although such a practice "would be inappropriate in the face of obvious contrary information or fraud."<sup>232</sup>

The previous section discussed industry's argument that the credible evidence rule deprives sources of "fair warning" of grounds for enforcement.<sup>233</sup> Industry likewise contends that introducing the concept of any credible evidence into the Title V certification process renders the compliance certification requirement unconstitutionally vague.<sup>234</sup> The argument is that reference methods "are necessary to define, in a consistent and reproducible manner, the level of performance that constitutes compliance."<sup>235</sup> In response, EPA points out that the new rule clearly preserves the role of reference tests as the benchmark for comparing other forms of data.<sup>236</sup>

As a related point, industry also argues that the credible evidence rule will significantly disrupt the Title V permit program.<sup>237</sup> Industry contends that, because the new rule will increase the stringency of underlying emission standards, permitting authorities will have to make corresponding adjustments in many sources' permit limits.<sup>238</sup> According to industry commenters, this will delay issuance of new permits and require amendment of existing permits.<sup>239</sup> EPA disagrees that any "Title V gridlock" will occur and flatly disputes industry's basic premise that the new rule increases the stringency of emission standards.<sup>240</sup>

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parallel provisions applies when "the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring." 40 C.F.R. §§ 70.6(a)(3)(B), 71.6(a)(3)(B). In this situation, the permit must contain "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." *Id.* Also, § 70.6(c) and § 71.6(c) (Permit content-compliance requirements) state that all permits shall contain "compliance certification, testing, monitoring, reporting and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit." 40 C.F.R. §§ 70.6(c), 71.6(c). The preamble to the Credible Evidence Rule notes that the pending CAM rulemaking proposes to modify existing permit program requirements to provide additional detail as to what information sources must consider when certifying compliance. *See* Credible Evidence Revisions, 62 Fed. Reg. 8314, 8319-20 (1997).

<sup>232</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8319. The preamble left open whether this would also be true in the case of noncontinuous reference tests. *See id.*

<sup>233</sup> *See supra* notes 184-219 and accompanying text.

<sup>234</sup> *See* Credible Evidence Revisions, 62 Fed. Reg. at 8320.

<sup>235</sup> *Id.*

<sup>236</sup> *See id.*

<sup>237</sup> *See id.*

<sup>238</sup> *See id.*

<sup>239</sup> *See* Credible Evidence Revisions, 62 Fed. Reg. at 8320.

<sup>240</sup> *See id.*

### C. EPA's Authority to Promulgate the Credible Evidence Rule

Critics have questioned several aspects of EPA's authority to promulgate the new rule.<sup>241</sup> They maintain that neither section 113(a) nor 113(e)(1) of the CAA authorizes the rule.<sup>242</sup> They also contend that EPA's rulemaking procedures were flawed in that it was improper for EPA to issue the final rule on the basis of the aborted 1993 enhanced monitoring proposal.<sup>243</sup> Finally, they believe that EPA lacks authority to require states to amend their SIPs to incorporate the new rule. As discussed below, EPA disputes all three points.<sup>244</sup>

#### 1. Statutory Authority for the Rule

When EPA first proposed the credible evidence revisions as part of the 1993 enhanced monitoring rulemaking,<sup>245</sup> it relied primarily on the "any credible evidence" language of CAA section 113(e)(1)<sup>246</sup> and on the legislative history of section 113, as expressed in the report of the Senate Committee on Environment and Public Works,<sup>247</sup> as underlying legal authority.<sup>248</sup> In the March 1996 White Paper<sup>249</sup> and in the final rule itself,<sup>250</sup> there was a marked shift in emphasis from section 113(e)(1) to the "any information available" language of section 113(a).<sup>251</sup> Numerous industry commenters have objected to EPA's reliance on both of these provisions.<sup>252</sup>

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<sup>241</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8320-23; RESPONSE TO COMMENTS, *supra* note 163, at 3-8.

<sup>242</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8320-23; RESPONSE TO COMMENTS, *supra* note 163, at 3-8.

<sup>243</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8320-23; RESPONSE TO COMMENTS, *supra* note 163, at 3-8.

<sup>244</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8320-23; RESPONSE TO COMMENTS, *supra* note 163, at 3-8.

<sup>245</sup> See Enhanced Monitoring Project, 58 Fed. Reg. 54,648 (1993).

<sup>246</sup> 42 U.S.C. § 7413(e)(1) (1994).

<sup>247</sup> See generally S. REP. NO. 101-228 (1989), reprinted in 1990 U.S.C.C.A.N. 3385.

<sup>248</sup> See Enhanced Monitoring Project, 58 Fed. Reg. 54,648, 54,658-60, 54,675 (1993). The enhanced monitoring proposal's preamble mentioned CAA section 113(a) in several places; however, it clearly placed primary emphasis on section 113(e)(1). See *id.* at 54,648.

<sup>249</sup> See generally WHITE PAPER, *supra* note 15.

<sup>250</sup> See Credible Evidence Revisions, 62 Fed. Reg. 8314, 8320.

<sup>251</sup> 42 U.S.C. § 7413(a) (1994) This shift in emphasis was perhaps in response to numerous comments which EPA received objecting to its reliance on section 113(e)(1). See, e.g., Letter from William H. Lewis, Counsel, Clean Air Implementation Project, to U.S. EPA (Jan. 31, 1994), EPA Public Docket No. A-91-52, Item No. IV-D-242.

<sup>252</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8321-23; RESPONSE TO COMMENTS, *supra* note 163; GE Comments, *supra* note 87.

Industry claims that neither the text of section 113(e)(1) nor its legislative history supports the credible evidence rule.<sup>253</sup> Section 113(e) is entitled "Penalty assessment criteria" and subsection 113(e)(1) states: "In determining the amount of any penalty to be assessed under [§ 113] (federal enforcement) or section 7604(a) (citizen suits), the [EPA] or the court, as appropriate, shall take into consideration . . . *the duration of the violation as established by any credible evidence (including evidence other than the applicable test method)* . . . ."<sup>254</sup> The commenters contend that the plain meaning of this provision is to allow the use of non-reference method "credible evidence" only to determine the duration of a violation for penalty assessment purposes.<sup>255</sup> They argue that section 113(e)(1) has no bearing on establishing a CAA violation in the first instance and in no way preempts the compliance methods specified in EPA regulations.<sup>256</sup> Thus, they argue, it does not provide authority for the new rule.<sup>257</sup>

The industry commenters contend that, given the clear statutory language, EPA should not even have considered legislative intent in construing section 113(e)(1).<sup>258</sup> Nonetheless, they believe that the legislative history, taken in its entirety, also fails to support EPA's interpretation.<sup>259</sup> EPA relies solely on the Senate committee report which states:

[T]his title of the bill enhances the ability of the Environmental Protection Agency . . . by making clear that the Agency may rely upon any credible evidence of violations in pursuing alleged violations . . . .

[T]he amendment clarifies that courts may consider any credible evidence of violation or compliance admissible under the Federal Rules of Evidence, and that they are not limited to consideration

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<sup>253</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8321-23; RESPONSE TO COMMENTS, *supra* note 163; GE Comments, *supra* note 87.

<sup>254</sup> 42 U.S.C. § 7413(e)(1) (1994) (emphasis added).

<sup>255</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8321-23; RESPONSE TO COMMENTS, *supra* note 163, at 3-8; GE Comments, *supra* note 87.

<sup>256</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8321-23; RESPONSE TO COMMENTS, *supra* note 163, at 3-8; GE Comments, *supra* note 87.

<sup>257</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8321-23; RESPONSE TO COMMENTS, *supra* note 163; GE Comments, *supra* note 87. As one commenter put it: "The language of Section 113(e) is clear: 'any credible evidence' can be used to measure the 'duration' of a violation that has already been proven by [a reference test method], not to establish the 'existence' or 'fact' of that violation in the first place." CMA Letter, *supra* note 210.

<sup>258</sup> RESPONSE TO COMMENTS, *supra* note 163.

<sup>259</sup> *Id.* The commenters claim that EPA's reliance on legislative intent under these circumstances was improper under the ruling in *Chevron v. NRDC*, 467 U.S. 837 (1984) ("Chevron Doctrine").

of evidence that is based solely on the applicable test method. . . . Thus, this amendment overrules the ruling in [*Kaiser Steel*] to the extent that the court in that case excluded the consideration of such evidence . . . .

[D]ata from enhanced monitoring and compliance certifications "will facilitate enforcement, due in part to the fact that such data and certifications can be used as evidence."<sup>260</sup>

The commenters contend that this language is ambiguous because the committee does not state whether it is referring to use of "credible evidence" to initially establish liability or just for penalty assessment.<sup>261</sup> They argue that the context of the committee report,<sup>262</sup> and the title and wording of section 113(e) itself, support the latter view.<sup>263</sup>

In addition, the commenters noted that the Senate committee report's reference to overruling the *Kaiser Steel* decision is consistent with the plain meaning of section 113(e)(1).<sup>264</sup> *Kaiser Steel* did not involve an attempt by the Government to establish liability in the first instance using "any credible evidence." Instead, the Government had reference test data for some days and was attempting to impose penalties for intervening days by means of expert testimony pertaining to opacity.<sup>265</sup> The commenters argue that this is precisely the type of situation that section 113(e) now covers.<sup>266</sup>

Industry commenters also contend that EPA did not properly consider other legislative history which clearly supports a limited interpretation of section 113(e)(1) as only applying to penalty assessment.<sup>267</sup> In particular they cite the analysis accompanying President Bush's bill to Congress, which contained a provision identical to the final section 113(e), and remarks by Senator Chaffee introducing the bill, both of which stated:

[S]ubsection 113(e)(1) also clarifies and confirms that once EPA establishes evidence of a violation *using a formal test method*,

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<sup>260</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8321; S. REP. No. 101-228 at 358, 366, 368 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3741, 3749, 3751.

<sup>261</sup> RESPONSE TO COMMENTS, *supra* note 163, at 3, 6-7; *see* GE Comments, *supra* note 87.

<sup>262</sup> For example, the Senate committee report's discussion of the proposed section 113(e) begins with the statement, "[t]he purpose of new section 113(e) . . . is to identify explicitly a uniform set of factors that both the courts and the Administrator shall consider in determining the appropriate amount of any penalty assessed under sections 113 or 304." S. REP. No. 101-228 at 365 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3749.

<sup>263</sup> RESPONSE TO COMMENTS, *supra* note 163; *see* GE Comments, *supra* note 87.

<sup>264</sup> *See* CMA Letter, *supra* note 210.

<sup>265</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8320.

<sup>266</sup> *See* CMA Letter, *supra* note 210.

<sup>267</sup> GE Comments, *supra* note 87.

EPA can use other credible evidence to prove additional violations, or that a violation has continued.<sup>268</sup>

One commenter also pointed out that neither the Conference Committee Report nor the "Chaffee-Baucus Statement of Senate Managers" on the Conference Committee Report addressed the scope of section 113(e)(1).<sup>269</sup> That same commenter also cited a statement by Chairman Dingell who indicated "that the Joint Statement of Conference Managers [was] the only authoritative legislative history of the [1990 CAAA] and that other statement do not [sic] reflect the views of the entire conference committee or of the Congress."<sup>270</sup>

EPA responds that "the best reading of the legislative history still supports its interpretation of Section 113(e)(1)."<sup>271</sup> Moreover, both the preamble to the final rule and response to comments now emphasize that the rule is based on section 113(a) and that section 113(e)(1) is merely cited as additional support.<sup>272</sup>

Industry commenters disagree with EPA's claim that section 113(a) supports the new rule.<sup>273</sup> Subsections a(1),(2),(3), and (5) of section 113 contain the phrase, "whenever, on the basis of any information available . . . the Administrator finds [a violation]," or similar wording.<sup>274</sup>

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<sup>268</sup> Message from the President, transmitting a draft of proposed legislation to amend the Clean Air Act, H.R. Doc. No. 87, 101st Cong., 1st Sess. 348-49 (July 24, 1989) (cited in GE Comments, *supra* note 87).

<sup>269</sup> H.R. REP. No. 952, at 347-48 (1990); 136 CONG. REC. 16,952 (Oct. 27, 1990) (both cited in GE Comments, *supra* note 87).

<sup>270</sup> 136 CONG. REC. E3714 (daily ed. Nov. 2, 1990) (cited in GE Comments, *supra* note 87).

<sup>271</sup> Credible Evidence Revisions, 62 Fed. Reg. 8314, 8321 (1997). EPA disputes claims that there is any ambiguity in the Senate report, and it contends that the Senate report is a more authoritative statement than Senator Chaffee's floor statement that was made at the beginning of the legislative process. *See id.*

<sup>272</sup> *Id.* As noted, this is a clear shift from EPA's position as articulated in the 1993 enhanced monitoring proposal.

<sup>273</sup> *See* Credible Evidence Revisions, 62 Fed. Reg. 8314; CMA Letter, *supra* note 210; Letter from Robert Brubaker, Counsel, Ohio Chemical Council and Ohio Chamber of Commerce, to Steven Viggiani, Senior Counsel, U.S. EPA (May 2, 1996), EPA Public Docket A91-52, Item No. IV-D-813 [hereinafter Ohio Letter].

<sup>274</sup> 42 U.S.C. §§ 7413(a)(1),(2),(3), (5) (1994). Subsection (d)(1) also uses similar wording in the context of administrative civil penalties. These sections read as follows:

§ 7413. Federal enforcement

(a) In general

(1) Order to comply with SIP

Whenever, on the basis of *any information available* . . . the Administrator finds that any person has violated or is in violation of . . . an applicable implementation plan or permit, the Administrator shall notify the person and the State . . . [and thereafter may issue a compliance order, an administrative penalty order or bring a civil action].

(2) State failure to enforce SIP or permit program

The commenters point out that this "any information available" language is not new.<sup>275</sup> Despite EPA's assertion that, "[t]his provision . . . demonstrates that Congress did not intend to limit EPA to using reference test method results in bringing enforcement actions," section 113(a) was not amended in 1990 to alter established methods of proving violations.<sup>276</sup> The commenters believe there is no evidence, apart from the previous discussion of section 113(e)(1), which is conflicting at best, that Congress ever intended such a result.<sup>277</sup> The current regulatory scheme, consisting of emission standards which specify reference tests as the compliance method, has been in place for more than twenty years and has coexisted with section 113(a)'s "any information available" language without intervention by Congress.<sup>278</sup> Industry essentially views this language as boilerplate and contends that it is an inadequate basis for a new rule which, from

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Whenever, on the basis of *information available* . . . the Administrator finds that violations of an . . . implementation plan or . . . permit program . . . are so widespread that [they] appear to result from a failure of the State . . . to enforce the plan or permit program effectively, the Administrator shall so notify the State [and thereafter may enforce such plan or permit program by issuing a compliance order, issuing an administrative penalty order or bringing a civil action].

(3) EPA enforcement of other requirements

. . . [W]henever, on the basis of *any information available* . . . the Administrator finds that any person has violated, or is in violation of. . . [subchapter III], section 7603 . . . subchapter IV-A, subchapter V, or subchapter VI . . . the Administrator may [issue an administrative penalty order, compliance order, bring a civil action, or request the Attorney General to commence a criminal action] . . . .

(5) Failure to comply with new source requirements

Whenever, on the basis of *any available information*, the Administrator finds that a State is not acting in compliance with . . . the chapter relating to the construction of new sources or the modification of existing sources, the Administrator may [issue an order prohibiting construction or modification of any major stationary source, issue an administrative penalty order, or bring a civil action] . . . .

(d) Administrative assessment of civil penalties

(1) The Administrator may issue an administrative order against any person assessing a civil administrative penalty of up to \$25,000, per day of violation, whenever, on the basis of *any available information*, the Administrator finds that such person [has violated various enumerated requirements or prohibitions or improperly attempts to construct or modify a major stationary source] . . . .

42 U.S.C. § 7413 (emphasis added).

<sup>275</sup> See, e.g., CMA Letter, *supra* note 210; Ohio Letter, *supra* note 273. It was first added to the CAA as part of the 1970 amendments, Pub. L. No. 91604, 84 Stat. 1676 (1970).

<sup>276</sup> Credible Evidence Revisions, 62 Fed. Reg. 8320.

<sup>277</sup> See *id.* at 8321; CMA Letter, *supra* note 210; Ohio Letter, *supra* note 273.

<sup>278</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8321; CMA Letter, *supra* note 210; Ohio Letter, *supra* note 273.

industry's perspective, alters underlying emissions standards and disrupts long-standing methods of establishing compliance.<sup>279</sup>

Several commenters have also pointed out that if EPA's interpretation of section 113(a) is correct, the amendment to section 113(e)(1) would have been unnecessary.<sup>280</sup> There would simply be no reason for Congress to provide specific authorization for EPA or the courts to consider non-reference test data for penalty assessment purposes, if such evidence were sufficient by itself to prove a violation in the first instance.<sup>281</sup> Finally, commenters noted that the "any information available" phraseology is used in other environmental statutes<sup>282</sup> and in no way eliminates regulatory and permit requirements to utilize designated tests to establish compliance or prove violations.<sup>283</sup>

In response to these concerns, EPA essentially reiterated its view that CAA section 113(a) grants it authority to amend its current regulations to clarify that reference test data is not the exclusive means of proving compliance or non-compliance in an enforcement action.<sup>284</sup> EPA cites the language of section 113(a) and the fact that nowhere does the CAA itself prohibit the use of non-reference test data to prove violations.<sup>285</sup> EPA also pointed out that its purpose in promulgating the new rule was not to establish a new standard of proof.<sup>286</sup> Instead it is trying to correct a dichotomy between what it believes is long-standing statutory authority to use non-reference test data and the relatively recent judicial interpretation of its regulatory authority, in *Kaiser Steel*, which precluded use of such data.<sup>287</sup>

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<sup>279</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8321; CMA Letter, *supra* note 210; Ohio Letter, *supra* note 273.

<sup>280</sup> See, e.g., CMA Letter, *supra* note 210; Ohio Letter, *supra* note 273.

<sup>281</sup> See CMA Letter, *supra* note 210; Ohio Letter, *supra* note 273.

<sup>282</sup> See, e.g., Clean Water Act, § 309(a)(1), 33 U.S.C. § 1319(a)(1) (1994).

<sup>283</sup> See, e.g., GE Comments, *supra* note 87; CMA Letter, *supra* note 210.

<sup>284</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8320, 8322. While EPA has not emphasized its general rulemaking authority under CAA section 301(a) in connection with this rule, at least one commenter contended that reliance on section 301(a) would also be improper because the new rule conflicts with section 113. RESPONSE TO COMMENTS, *supra* note 163. EPA responded that there is no conflict and that rule is consistent with sections 113(a) and (e). See *id.* at 96-97.

<sup>285</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8320-22; RESPONSE TO COMMENTS, *supra* note 163, at 6-8.

<sup>286</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8320-22; RESPONSE TO COMMENTS, *supra* note 163, at 6-8.

<sup>287</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8320-22; RESPONSE TO COMMENTS, *supra* note 163, at 6-8.



## 2. EPA's Rulemaking Procedures

Previous sections of this paper chronicled EPA's rulemaking process that began in October 1993 with the enhanced monitoring proposal and culminated in February 1997 with the final credible evidence rule.<sup>288</sup> Numerous industry commenters have objected to EPA's procedures and claimed that it violated the CAA, the Administrative Procedure Act (APA),<sup>289</sup> and due process.<sup>290</sup>

The commenters' main argument is that the credible evidence revisions were first proposed as part of an enhanced monitoring regulation which, to some extent, spelled out the types of monitoring data that would be considered "credible evidence."<sup>291</sup> Industry's original comments on the credible evidence revisions were thus made in that specific context.<sup>292</sup> EPA subsequently abandoned enhanced monitoring in favor of a CAM approach that had not even been released for public comment when EPA resurrected the credible evidence revisions as a stand-alone proposal in March 1996.<sup>293</sup> Since CAM data will likely be a principal source of "credible evidence" for enforcement and compliance certification, industry contends that they could not adequately comment on the credible evidence proposal without fully understanding its linkage to CAM.<sup>294</sup>

Commenters also contend that because the 1993 enhanced monitoring approach had effectively been abandoned, EPA's actions beginning in March 1996 to resurrect the credible evidence revisions actually constituted a new rulemaking.<sup>295</sup> They claim that EPA failed to proceed in accordance with CAA section 307(d) and APA section 553 procedures for such rulemakings which require, *inter alia*, publication of a notice in the Federal Register that includes a statement of the

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<sup>288</sup> See *supra* notes 37-62, 79-90 and accompanying text.

<sup>289</sup> 5 U.S.C. §§ 551-559 (1994). CAA section 307(d) procedures generally supersede the APA for rules implementing the CAA. See 42 U.S.C. § 7607(d)(1) (1994).

<sup>290</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96.

<sup>291</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96.

<sup>292</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23.

<sup>293</sup> EPA encouraged submission of public comments on the stand-alone credible evidence proposal by not later than May 2, 1996. See Credible Evidence Revisions, 62 Fed. Reg. at 8316. The draft CAM proposal was released for comment on August 13, 1996. See Compliance Assurance Monitoring, 61 Fed. Reg. 41,991 (1996).

<sup>294</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96.

<sup>295</sup> See generally RESPONSE TO COMMENTS, *supra* note 163; Ohio Letter, *supra* note 273; GE Comments, *supra* note 87; API Letter, *supra* note 215.

proposed rule's basis and purpose and which specifies the public comment period.<sup>296</sup> Specifically, commenters were scathingly critical of EPA's decision to disseminate its White Paper and stakeholders' meeting announcement via EPA's electronic bulletin board system rather than use the Federal Register.<sup>297</sup> Likewise, they criticized EPA's failure to formally announce a comment period—at the April 2, 1996 stakeholders' meeting, EPA verbally announced its willingness to read comments submitted by May 2, 1996, but it never published this information in the Federal Register.<sup>298</sup> The commenters also argue that the White Paper itself, even when read in conjunction with the 1993 enhanced monitoring proposal, was inadequate as a statement of the basis and purpose of the new credible evidence revisions because it contained only a superficial analysis of the new rule's impacts and because it failed to define the term "credible evidence."<sup>299</sup> In short, the industry commenters contend that EPA did not proceed in a manner calculated to obtain full participation by interested parties.<sup>300</sup>

EPA obviously has another perspective on the rulemaking process that it followed and vigorously disputes the above criticisms.<sup>301</sup> First, it disagrees with commenters' claims that they cannot meaningfully comment on the credible evidence revisions prior to proposal of the CAM rule.<sup>302</sup> EPA views CAM data as only one form of evidence that might be considered for compliance and enforcement purposes and thus knowledge of that rule is not essential to understand the credible evidence proposal.<sup>303</sup> EPA points out that general knowledge of the CAM approach was available since September 1995.<sup>304</sup> It also distributed a revision of the CAM approach in August 1996, which spe-

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<sup>296</sup> See 42 U.S.C. § 7607(d)(3) (1994); 5 U.S.C. § 553(b) (1994).

<sup>297</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96; Ohio Letter, *supra* note 273; API Letter, *supra* note 215.

<sup>298</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96; Ohio Letter, *supra* note 273; API Letter, *supra* note 215.

<sup>299</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96; Ohio Letter, *supra* note 273; API Letter, *supra* note 215.

<sup>300</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96; Ohio Letter, *supra* note 273; API Letter, *supra* note 215.

<sup>301</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96.

<sup>302</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96.

<sup>303</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96.

<sup>304</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96.

cifically discussed the relationship of CAM and credible evidence, and subsequently received comments on the CAM proposal's enforcement consequences.<sup>305</sup>

Second, EPA contends that the rulemaking process was procedurally proper.<sup>306</sup> It does not view the credible evidence revisions as a separate rulemaking and believes that the 1993 CAM proposal, *per se*, gave interested parties sufficient notice of and opportunity to comment on all the relevant issues.<sup>307</sup> It states that, "[n]one of the additional public outreach actions that EPA undertook in 1996 were required by the APA or CAA; instead, EPA undertook them voluntarily to ensure full input by interested parties."<sup>308</sup>

### 3. SIP Revisions

In conjunction with the new rule, EPA has initiated a call for states to revise their SIPs to incorporate the credible evidence provisions.<sup>309</sup> EPA has also encouraged its regional offices to process the revisions on an expedited basis.<sup>310</sup> These actions concern industry because, once credible evidence provisions are incorporated into state law and regulations under the SIP process,<sup>311</sup> they could be applied in state proceedings regardless of the ultimate outcome of the current federal-level challenges to the new rule.<sup>312</sup>

Industry commenters claim that EPA lacks authority under the CAA to change 40 C.F.R. part 51 to require that states revise their SIPs to include credible evidence rules.<sup>313</sup> They argue that nothing in CAA sections 110 or 113 compels states to adopt a credible evidence rule or prohibits states from choosing their own regulatory ap-

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<sup>305</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96.

<sup>306</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96.

<sup>307</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8322-23; RESPONSE TO COMMENTS, *supra* note 163, at 94-96.

<sup>308</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8323.

<sup>309</sup> See *id.*

<sup>310</sup> See Enforcement Guidance Memorandum, *supra* note 170.

<sup>311</sup> See generally CAA section 110, 42 U.S.C. § 7410 (1994).

<sup>312</sup> See *Faster Reviews of Credible Evidence Plans Could Undermine Court Review of EPA Rule*, Nat'l Env'tl. Daily, (BNA) at d-11 (May 6, 1997).

<sup>313</sup> See RESPONSE TO COMMENTS, *supra* note 163, at 104; Letter from counsel for the Utility Air Regulatory Group (UARG), to U.S. EPA (Dec. 10, 1996), EPA Public Docket A-91-52, Item No. IV-D-845 [hereinafter UARG Letter]; Motion of Petitioners for Expedited Consideration of Petitions for Review, Clean Air Implementation Project v. EPA, No. 91-1117 (D.C. Cir. 1997).

proaches for determining compliance.<sup>314</sup> The commenters also point out that, under CAA section 110(k)(5), prior to any call for a SIP revision, there must be a finding by EPA Administrator that the SIP is "substantially inadequate" to comply with a national ambient air quality standard (NAAQS) or other requirement of the CAA.<sup>315</sup> The commenters assert that no such finding has been made here or that, if one has been made, it is invalid.<sup>316</sup>

EPA disagrees with these points.<sup>317</sup> It states that the amendment to part 51 is promulgated under provisions which (i) require SIPs to provide adequate enforcement authority (section 110(a)(2)(A), (C), & (E)), (ii) allow EPA to call for SIP revisions to correct "inadequacies" (section 110(k)(5)),<sup>318</sup> and (iii) provide general rulemaking authority for EPA to carry out its functions under the CAA (section 301(a)).<sup>319</sup> It states, "[w]hether this amendment . . . is authorized turns on whether EPA has authority to adopt an enforcement approach that allows use of any credible evidence. As described . . . EPA believes the Act provides . . . ample authority to allow enforcement based on any credible evidence."<sup>320</sup>

#### D. *Impact on Emissions Standards*

In its White Paper and throughout the preamble to the new rule and the response to comments document, EPA claims that the rule does not modify any emission standard or affect any existing compliance obligation.<sup>321</sup> Industry strenuously disagrees and fears that the new rule will effectively increase stringency of many emission standards, including SIP limits and standards established under the NSPS and NESHAPS programs.<sup>322</sup> This issue lies at the heart of the credible evidence debate, and industry's concerns over stringency carry over to other arguments previously discussed. For example, the argument

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<sup>314</sup> See RESPONSE TO COMMENTS, *supra* note 163, at 104.

<sup>315</sup> See *id.*

<sup>316</sup> See *id.*

<sup>317</sup> See *id.*

<sup>318</sup> Interestingly, the Response to Comments document did not use the expression "substantially inadequate," which is the statutory standard. It also did not indicate whether EPA had made the required finding.

<sup>319</sup> See *id.*

<sup>320</sup> See RESPONSE TO COMMENTS, *supra* note 163, at 104.

<sup>321</sup> EPA in fact devoted the majority of the Credible Evidence Rule preamble and Response to Comments document to this issue. See Credible Evidence Revisions, 62 Fed. Reg. 8314, 8323-27 (1997); RESPONSE TO COMMENTS, *supra* note 163, at 28-34.

<sup>322</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8323.

that CAA section 113(a) does not authorize the rule<sup>323</sup> is, to a certain extent, an argument that this provision may not be interpreted in a way that upsets emission standards that, in some cases, are over twenty years old. Also, industry's contention that EPA did not follow proper rulemaking procedures<sup>324</sup> is, in part, an argument that EPA did not follow the CAA's process for changing emissions standards.<sup>325</sup> As discussed below, industry contends that "the compliance method is inextricably linked with the emission limit itself and that it is impossible to consider changing the compliance test method without a full evaluation of the impacts any change might have on the emission limit."<sup>326</sup>

Industry first points out that each emission standard actually consists of two components: the general provisions (e.g., subpart A of 40 C.F.R. parts 60 (NSPS) and 61 (NESHAPS)) and the specific subpart for the standard itself (e.g., subparts C-WWW of part 60 and subparts B-FF of part 61).<sup>327</sup> The general provisions include such integral features as definitions,<sup>328</sup> notification and record keeping requirements,<sup>329</sup> performance testing and compliance procedures,<sup>330</sup> monitoring requirements applicable to those subparts which use continuous monitoring systems (CMS) to determine compliance,<sup>331</sup> and incorporations by reference.<sup>332</sup> These general provisions are clearly applicable to the ensuing subparts which delineate specific standards. Since the new rule expressly modifies these subpart A general provisions, industry argues that it necessarily changes each substantive standard as well.<sup>333</sup>

Second, and more fundamentally, industry argues that allowing use of non-reference test data to prove violations would be contrary to the process by which EPA established many NSPS and other emis-

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<sup>323</sup> See *supra* notes 273-79 and accompanying text.

<sup>324</sup> See *supra* notes 280-83 and accompanying text.

<sup>325</sup> See *infra* notes 358-59 and accompanying text.

<sup>326</sup> RESPONSE TO COMMENTS, *supra* note 163, at 28.

<sup>327</sup> See, e.g., *Opposition of Petitioners to U.S. EPA's Motion to Dismiss Certain Petitions at 4, Clean Air Implementation Project v. EPA*, No. 97-1117 (D.C. Cir. 1997) [hereinafter *Opposition to Motion*]. The § 60 NSPS program and § 61 NESHAP program have been cited for simplicity of example; however, the same analysis applies to the SIP program as well because the changes to §§ 51 and 52 are of general applicability to all SIPs.

<sup>328</sup> See, e.g., 40 C.F.R. §§ 60.2, 61.02 (1997).

<sup>329</sup> See, e.g., 40 C.F.R. §§ 60.7, 61.09, 61.10.

<sup>330</sup> See, e.g., 40 C.F.R. §§ 60.8, 60.11, 61.12, 61.13.

<sup>331</sup> See, e.g., 40 C.F.R. §§ 60.13, 61.14.

<sup>332</sup> See, e.g., 40 C.F.R. §§ 60.17, 61.18.

<sup>333</sup> *Opposition to Motion*, *supra* note 327, at 5.

sions standards.<sup>334</sup> A short summary of the standard-setting process and types of NSPS will serve as background. The discussion will center on the CAA section 111<sup>335</sup> NSPS program, implemented at 40 C.F.R. part 60. This is for simplicity of example; also, most of the current challenges to the new rule emphasize its impact upon the NSPS program.

CAA section 111 provides that NSPS shall be based on "[t]he degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated."<sup>336</sup> This criterion is generally referred to as "best demonstrated technology" (BDT). Individual NSPS are established through a rulemaking process which requires EPA to develop an administrative record that explains how a proposed standard meets the BDT criterion.<sup>337</sup> Because of the high capital investment cost of building or modifying a facility to incorporate a particular BDT, any new or revised standards promulgated under this process apply only on a prospective basis.<sup>338</sup>

Industry points out that there are two categories of numerical emissions standards under the NSPS program, with fundamental differences between the two as to the type of data considered during the standard-setting process to determine the BDT.<sup>339</sup> The first category is the stack test NSPS.<sup>340</sup> Stack test NSPS were developed from a small number of performance tests conducted during "representative" operating conditions.<sup>341</sup> These tests covered brief periods of time and yielded short-term "snapshots" of the source's emissions.<sup>342</sup> According to industry, the data considered did not reflect the

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<sup>334</sup> The section is based in large part on the thorough explanation of the standard-setting process contained in various documents. *See id.* at 10-15; *see also* CMA Letter, *supra* note 210; Memorandum from Robert L. Ajax on The Effect of Compliance Test Frequency on the Stringency of Technology Based Standards (Mar. 9, 1995) [hereinafter Ajax Memorandum]; UARG Letter, *supra* note 313.

<sup>335</sup> 42 U.S.C. § 7411 (1994).

<sup>336</sup> 42 U.S.C. § 7411(a)(1).

<sup>337</sup> *See generally* 42 U.S.C. § 7607(d) (1994).

<sup>338</sup> 42 U.S.C. § 7411(a)(2); 40 C.F.R. § 60.1(b) (1997).

<sup>339</sup> *See* Opposition to Motion, *supra* note 327, at 10; UARG Letter, *supra* note 313.

<sup>340</sup> *See* Opposition to Motion, *supra* note 327, at 1015; UARG Letter, *supra* note 313.

<sup>341</sup> *See* Opposition to Motion, *supra* note 327, at 1015; UARG Letter, *supra* note 313.

<sup>342</sup> *See* Opposition to Motion, *supra* note 327, at 1015; UARG Letter, *supra* note 313. An example of this type of standard is the NSPS at 40 C.F.R. § 60, subpart D, "Standards of

variability in emissions associated with running the proposed BDT over extended periods of time and over a full range of operating conditions.<sup>343</sup> Industry claims that these NSPS have typically been set at roughly the level of the measured emissions.<sup>344</sup> Consistent with the data used to evaluate the proposed BDT and to designate the numerical emission limit, these NSPS specified the same short-term performance test as the compliance method.<sup>345</sup> They further required that the compliance method be performed only under “representative” operating conditions.<sup>346</sup>

The second category is CEM NSPS.<sup>347</sup> CEM NSPS were developed through performance tests that used continuous emissions monitoring systems.<sup>348</sup> With CEM standards, data was collected over relatively long periods of time and during all operating conditions.<sup>349</sup> According to industry, such data allowed EPA to set numerical standards based on statistical analyses that accounted for emissions variability.<sup>350</sup> Also, EPA could specify appropriate averaging times (e.g., 30-day rolling averages) that ensured the standards were achievable in a facility using the BDT.<sup>351</sup> Consistent with how these standards were set, CEM was the designated compliance method.<sup>352</sup>

With the preceding discussion as background, industry has expressed several concerns over how the new rule will affect existing NSPS.<sup>353</sup> First, many stack test NSPS include requirements for CEMS monitoring.<sup>354</sup> EPA had previously assured industry that such monitoring was only for “indicator” purposes and would not be used to determine compliance with numerical standards.<sup>355</sup> In other words,

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Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971.” See 40 C.F.R. § 60.40.

<sup>343</sup> See Opposition to Motion, *supra* note 327, at 10–11; UARG Letter, *supra* note 313.

<sup>344</sup> See Opposition to Motion, *supra* note 327, at 10–11; UARG Letter, *supra* note 313.

<sup>345</sup> See Opposition to Motion, *supra* note 327, at 10–11; UARG Letter, *supra* note 313.

<sup>346</sup> See Opposition to Motion, *supra* note 327, at 10–11; UARG Letter, *supra* note 313; see also 40 C.F.R. § 60.8(c).

<sup>347</sup> See Opposition to Motion, *supra* note 327, at 10–11; UARG Letter, *supra* note 313.

<sup>348</sup> See Opposition to Motion, *supra* note 327, at 10–11; UARG Letter, *supra* note 313.

<sup>349</sup> An example of this type of standard is the NSPS at 40 C.F.R. § 60, subpart Da, “Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978.” Here the SO<sub>2</sub> standard is a CEM NSPS, while the PM<sub>10</sub> standard is a stack test NSPS. See 40 C.F.R. §§ 60.40a–60.44a. CEM emissions standards were not widely used until the late 1970s, when the reliability of CEMS technology improved.

<sup>350</sup> Opposition to Motion, *supra* note 327, at 12; UARG Letter, *supra* note 313, at 4.

<sup>351</sup> See Opposition to Motion, *supra* note 327, at 12; UARG Letter, *supra* note 313, at 4.

<sup>352</sup> See Opposition to Motion, *supra* note 327, at 12; UARG Letter, *supra* note 313, at 4.

<sup>353</sup> See Opposition to Motion, *supra* note 327, at 12; UARG Letter, *supra* note 313, at 5.

<sup>354</sup> See Opposition to Motion, *supra* note 327, at 12; UARG Letter, *supra* note 313, at 5.

<sup>355</sup> See Opposition to Motion, *supra* note 327, at 12; UARG Letter, *supra* note 313, at 5.

data would be used to target requests for follow-up compliance tests or to gauge whether a facility was meeting its general duty to properly operate and maintain equipment.<sup>356</sup> As part of the credible evidence rule, however, EPA has announced that it will now use this CEM data to directly determine compliance.<sup>357</sup> According to industry, this is improper because EPA failed to conduct a rulemaking to determine if an existing source using a given BDT can still meet the numerical NSPS that were originally set based on short-term performance test data.<sup>358</sup> Industry contends this new enforcement approach violates the rulemaking requirements of CAA section 307(d) and the section 111 requirement for prospective application of new or revised standards.<sup>359</sup>

Industry also points out that stack test NSPS were based on data obtained during "representative" operating conditions.<sup>360</sup> While the standards expressly provide excused periods for excess emissions due to start-up, shutdown, and malfunction,<sup>361</sup> industry contends that there are other categories of operating conditions which lie between "representative" and excused periods.<sup>362</sup> Industry contends that CEM data obtained during such periods would suggest a "violation" whereas data from the compliance test conducted during "representative" conditions would not.<sup>363</sup> The new rule thereby increases industry's enforcement exposure and will force it to rebut inaccurate claims of violation.<sup>364</sup>

Industry also contends that simply raising the frequency of testing increases standard stringency.<sup>365</sup> According to one industry expert, stack test NSPS (which, again, were based on relatively few data points) were set "at levels which have an uncertain, but relatively high probability of being exceeded during any test—typically 5% to 10%—probability of an exceedance during any performance test."<sup>366</sup> For testing performed once a year, the expected frequency of exceedances would range from once in ten years to once in twenty

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<sup>356</sup> See Opposition to Motion, *supra* note 327, at 12–13; UARG Letter, *supra* note 313, at 5.

<sup>357</sup> See Opposition to Motion, *supra* note 327, at 12–13; UARG Letter, *supra* note 313, at 5; see also Credible Evidence Revisions, 62 Fed. Reg. 8314, 8326 (1997).

<sup>358</sup> Opposition to Motion, *supra* note 327, at 13; UARG Letter, *supra* note 313.

<sup>359</sup> Opposition to Motion, *supra* note 327, at 13; UARG Letter, *supra* note 313.

<sup>360</sup> See CMA Letter, *supra* note 210; Ajax Memorandum, *supra* note 334.

<sup>361</sup> See, e.g., 40 C.F.R. § 60.8(c) (1997).

<sup>362</sup> CMA Letter, *supra* note 210; Ajax Memorandum, *supra* note 334.

<sup>363</sup> See CMA Letter, *supra* note 210; Ajax Memorandum, *supra* note 334.

<sup>364</sup> See CMA Letter, *supra* note 210; Ajax Memorandum, *supra* note 334.

<sup>365</sup> See Ajax Memorandum, *supra* note 334.

<sup>366</sup> See *id.*



years.<sup>367</sup> However, if testing were conducted on a daily basis, as might be the case with CEMS, the number of exceedances increases to eighteen to thirty-six per year.<sup>368</sup> Industry claims, with this concern in mind, that EPA made numerous assurances in conjunction with promulgation of the stack test NSPS that compliance tests would be required only on an infrequent basis.<sup>369</sup>

Industry thus views its CAA compliance obligation in limited terms.<sup>370</sup> It contends that EPA, in setting stack test NSPS, never contemplated that sources would stay in continuous compliance with numeric standards at all times and under all conditions.<sup>371</sup> Instead, sources were to make an initial compliance demonstration by passing the specified performance test at start-up.<sup>372</sup> Thereafter, they were only obliged to stay in continuous compliance with the general duty to operate and maintain facilities consistent with good air pollution control practices,<sup>373</sup> and to pass subsequent performance tests on an infrequent basis.<sup>374</sup>

Industry cites various cases for the propositions that: (i) monitoring is an inherent part of an emissions standard and changing a standard's monitoring aspect can affect achievability and (ii) EPA must conduct a CAA section 307(d) rulemaking before changing methods of proving compliance.<sup>375</sup> The two most often cited are *Portland Cement Ass'n v. Ruckelshaus*<sup>376</sup> and *Donner Hanna Coke Corp. v. Costle*.<sup>377</sup> Neither case is directly on point, but each has language that supports industry's position.<sup>378</sup>

*Portland Cement* was a challenge to a NSPS promulgated for Portland Cement plants.<sup>379</sup> Industry argued, inter alia, that EPA had failed to adequately demonstrate that the new standard was achievable, as required by CAA section 111.<sup>380</sup> The United States Court of Appeals for the District of Columbia agreed and remanded the standard for

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<sup>367</sup> See *id.*

<sup>368</sup> See *id.*

<sup>369</sup> See *id.* at 8, 11.

<sup>370</sup> Credible Evidence Revisions, 62 Fed. Reg. 8314, 8323 (1997).

<sup>371</sup> See *id.*

<sup>372</sup> See *id.*

<sup>373</sup> See 40 C.F.R. § 60.11(d) (1997); Credible Evidence Revisions, 62 Fed. Reg. at 8323.

<sup>374</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8323.

<sup>375</sup> See CMA Letter, *supra* note 210; UARG Letter, *supra* note 313.

<sup>376</sup> See *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375 (D.C. Cir. 1973), *cert. denied*, 417 U.S. 921 (1974).

<sup>377</sup> *Donner Hanna Coke Corp. v. Costle*, 464 F. Supp. 1295 (W.D.N.Y. 1979).

<sup>378</sup> See CMA Letter, *supra* note 210; UARG Letter, *supra* note 313.

<sup>379</sup> See *generally Portland Cement*, 486 F.2d at 377-79.

<sup>380</sup> See *id.*

further consideration.<sup>381</sup> The appeals court concluded that EPA's rule-making was critically flawed in that it failed (i) to make available to interested parties test results and procedures used in formulating the standard, (ii) to adequately respond to comments and technical objections of cement manufacturers, and (iii) to clearly identify the basis for the standards promulgated.<sup>382</sup> One of the specific objections was to the sampling technique used by EPA to measure emissions at the plant believed to represent BDT.<sup>383</sup> EPA's data was based on thirty-minute sampling periods, whereas the proposed rule's compliance test called for two-hour averages.<sup>384</sup> In discussing this, the court stated: "[A] significant difference between techniques used by the agency in arriving at standards, and requirements presently prescribed for determining compliance with standards, raises serious questions about the validity of the standard."<sup>385</sup> The court concluded that it was incumbent upon EPA to explain the discrepancy between the methodology used to set the NSPS and that which would be used to enforce it.<sup>386</sup>

In *Donner Hanna*, the operator of a coke plant in New York sought judicial review of an EPA administrative order directing the operator to allow inspection of its coke oven batteries for compliance with opacity standards.<sup>387</sup> Because it disputed the reliability of EPA's proposed testing method, the operator refused to allow the inspection.<sup>388</sup> The relevant standard set forth in New York's SIP allowed emission of smoke from the battery of greater than twenty percent opacity if such emission continued for not more than three minutes of any consecutive sixty-minute period.<sup>389</sup> The SIP, however, did not specify procedures for measuring compliance with this standard, and, because of the intermittent nature of coke oven emissions, Reference Method 9, the default method for measuring opacity,<sup>390</sup> could not be used without adaptation.<sup>391</sup> EPA had developed informal guidelines for measuring opacity under such circumstances, and its inspectors applied these guidelines in conjunction with a testing protocol which

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<sup>381</sup> *Id.* at 386-87.

<sup>382</sup> *See id.* at 392-95.

<sup>383</sup> *Id.*

<sup>384</sup> *Portland Cement*, 486 F.2d at 397.

<sup>385</sup> *Id.* at 396.

<sup>386</sup> *See id.* at 397.

<sup>387</sup> *Donner Hanna Coke Corp. v. Costle*, 464 F. Supp. 1295, 1295 (W.D.N.Y. 1979).

<sup>388</sup> *Id.* at 1297.

<sup>389</sup> *Id.* at 1300.

<sup>390</sup> *See* 40 C.F.R. §§ 52.12(c)(1), 60 appen. A, Method 9.

<sup>391</sup> *Donner Hanna*, 464 F. Supp. at 1300-02.

aggregated a series of unaveraged readings.<sup>392</sup> The coke plant operator objected on the grounds that (i) neither EPA guidelines nor the testing protocol had been promulgated through formal rulemaking procedures and (ii) the use of unaveraged readings was contrary to Reference Method 9, which contemplated an average of twenty-five consecutive readings taken at fifteen-second intervals.<sup>393</sup> The court agreed with the operator on both counts and, citing *Portland Cement*, stated:

It is undisputed that the method of determining compliance with an emission standard can affect the level of performance required by the standard, even though the standard itself has not changed. . . . Enforcement officials cannot circumvent the rule-making requirements of the Clean Air Act by making substantial changes in testing methods without notice and a hearing. . . .

The significance of rulemaking cannot be underemphasized. It gives parties affected by a decision an opportunity to participate in the decision-making process and forces EPA to articulate the bases for its decisions. . . . These procedures tend to produce more objective testing methods. . . . It also enables aggrieved parties to seek judicial review under the Clean Air Act.<sup>394</sup>

EPA flatly disagrees with the foregoing arguments.<sup>395</sup> In the credible evidence rule preamble, it first contends that the CAA, its regulations, and case law all require a source to be in continuous compliance, consistent with any averaging periods specified in a standard, except during periods when compliance is specifically excused.<sup>396</sup> EPA contends that industry's position is contrary to the CAA's underlying purpose of achieving clean air.<sup>397</sup> The preamble cites sections of the CAA which, according to EPA, show a clear intent that sources be in continuous compliance.<sup>398</sup> CAA section 302(k) defines "emission limitation" and "emission standard" as "a requirement . . . which limits the quantity, rate, or concentration of emissions . . . on a continuous

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<sup>392</sup> *Id.* at 1300-01.

<sup>393</sup> *Id.* at 1302.

<sup>394</sup> *Id.* at 1304-05 (citations omitted).

<sup>395</sup> EPA's general position may be summarized as follows:

EPA believes that industry's arguments on this point are fundamentally wrong. It is not EPA's intent that these rules should increase the stringency of an applicable requirement. These rules do not do so because they maintain the focus of the compliance determination on whether or not the appropriate reference test would have shown a violation.

Credible Evidence Revisions, 62 Fed. Reg. 8314, 8323 (1997).

<sup>396</sup> *See id.*

<sup>397</sup> *See id.* at 8322-24.

<sup>398</sup> *See id.*

basis.”<sup>399</sup> Section 113(e)(1), even on its narrowest reading, expressly provides for use of non-reference test data to prove continuing additional days of violation after an initial violation is established.<sup>400</sup> Section 113(e)(2) provides that “a penalty may be assessed for each day of violation,” and it establishes a presumption of continuing violation if certain conditions are met.<sup>401</sup> Section 114(a)(1)(D) allows EPA to order reference tests at any time,<sup>402</sup> and section 114(a)(3) requires certifications to state whether compliance is continuous or intermittent.<sup>403</sup>

EPA likewise believes that the CAA regulations contemplate continuous compliance.<sup>404</sup> NSPS provisions typically require that a source comply with stated emissions limits “*on and after* the date on which the initial performance test required by [40 C.F.R.] § 60.8 is completed.”<sup>405</sup> EPA points out that the need for continuous compliance is discussed in the preambles to many NSPS.<sup>406</sup> It also points out that the NSPS general provisions (e.g., 40 C.F.R. § 60.8) and individual standards (e.g., 40 C.F.R. § 60.46b) specify excused periods of noncompliance—typically start-up, shutdown, or malfunction.<sup>407</sup> It states that the existence of these excused periods confirms “that sources must comply at all other times.”<sup>408</sup> EPA also cites various court decisions which approved of the basic NSPS regulatory scheme of continuous compliance accompanied by limited, specified exceptions.<sup>409</sup>

The preamble discussed several specific NSPS cited by industry commenters as evidence that EPA never intended sources to be in continuous compliance.<sup>410</sup> One example involved the NSPS for kraft

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<sup>399</sup> 42 U.S.C. § 7602(k) (1994).

<sup>400</sup> See 42 U.S.C. § 7413(e)(1) (1994). The preamble notes that EPA's reading of this section is considerably broader. See *Credible Evidence Revisions*, 62 Fed. Reg. at 8324.

<sup>401</sup> 42 U.S.C. § 7413(e)(2).

<sup>402</sup> See 42 U.S.C. § 7414(a)(1)(D) (1994).

<sup>403</sup> See 42 U.S.C. § 7414(a)(3); see also CAA section 504, 42 U.S.C. § 7661c (1994).

<sup>404</sup> *Credible Evidence Revisions*, 62 Fed. Reg. at 8323.

<sup>405</sup> See, e.g., 40 C.F.R. § 60.502 (1997).

<sup>406</sup> As an example, EPA cited 48 Fed. Reg. 50,670, 50,675 (1983), the preamble to the subpart CC NSPS for glass manufacturing plants, which emphasized the need for effective monitoring to assure that sources are “continuing to maintain the emission reduction observed during the performance test.” *Credible Evidence Revisions*, 62 Fed. Reg. at 8323.

<sup>407</sup> 40 C.F.R. §§ 60.8, 60.46b.

<sup>408</sup> *Credible Evidence Revisions*, 62 Fed. Reg. at 8323.

<sup>409</sup> *Id.* See generally *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375 (D.C. Cir. 1973), *cert. denied*, 417 U.S. 921 (1974); *Bunker Hill Co. v. EPA*, 572 F.2d 1286 (9th Cir. 1977); *Sierra Club v. Costle*, 657 F.2d 298 (D.C. Cir. 1981).

<sup>410</sup> *Credible Evidence Revisions*, 62 Fed. Reg. at 8225; *RESPONSE TO COMMENTS*, *supra* note 163, at 37.

pulp mills at 40 C.F.R. part 60, subpart BB.<sup>411</sup> Industry commenters noted that this NSPS states that certain "excess emissions" shall not be considered violations of the specified opacity standards, provided they do not exceed six percent of the total operating hours for a facility during a quarter.<sup>412</sup> EPA contends that this type of provision actually shows that where it intended to allow affected sources to exceed stated emission limits, the standards so provide and that otherwise sources must be in continuous compliance.<sup>413</sup>

EPA acknowledged that in developing certain emissions standards, it was "concerned with the limited number and distribution of test runs and the inherent variability in levels of emissions from even well-controlled facilities."<sup>414</sup> Nonetheless, EPA contends that, where appropriate, it took these types of concerns into account by adjusting the standard's numerical value, providing excess emissions allowances, specifying provisions for noncompliance during certain upset conditions, and/or by changing averaging times.<sup>415</sup> It maintains that where the standard did not expressly permit any deviation, EPA intended for sources to comply on a continuous basis.<sup>416</sup> As further support for the notion that continuous compliance is feasible, the preamble discusses an empirical study which, according to EPA, shows "that most sources do comply all or nearly all of the time."<sup>417</sup>

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<sup>411</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8225; RESPONSE TO COMMENTS, *supra* note 163, at 37.

<sup>412</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8225; RESPONSE TO COMMENTS, *supra* note 163, at 37. The provision in question is 40 C.F.R. § 60.284(e)(1)(ii) (1994).

<sup>413</sup> See Credible Evidence Revisions, 62 Fed. Reg. at 8325.

<sup>414</sup> *Id.*

<sup>415</sup> See *id.*

<sup>416</sup> See *id.* The detailed response to the comments discussed numerous instances of how EPA took limited test data and short-term operational variability into account in the course of setting specific emissions standards. In this discussion, EPA also pointed out language in the preambles to these various standards which, it contended, demonstrates that sources were to be in continuous compliance unless otherwise excused. See *id.*; RESPONSE TO COMMENTS, *supra* note 163, at 37-84. A relatively short example of this discussion is set out below:

*Subpart J.* Subpart J provides an example of how EPA responded to the problems of limited test and performance data and inherent variability in the operation—and emissions—of affected sources by promulgating emission limits that were sufficiently high to account for these problems. In this example, EPA provided an adequate margin of safety above the data points in the test runs. In promulgating the NSPS for petroleum refinery Claus sulfur recovery plants (40 CFR § 60, Subpart J), EPA stated: "the numerical emission limits in the standard contain an adequate safety margin to allow for increased emissions due to Claus sulfur recovery plant fluctuations. 43 FR 10867 (March 15, 1978) . . . .

RESPONSE TO COMMENTS, *supra* note 163, at 49.

<sup>417</sup> This study, conducted by EPA Region V in 1993, found, *inter alia*, that 95% of sources with

EPA rejected industry's argument that increasing testing frequency, per se, makes the standards more stringent.<sup>418</sup> In EPA's view, such an argument is contrary to CAA section 114(a)(1), which gives EPA broad discretion to order tests.<sup>419</sup> It also illogically implies that EPA or state regulators are somehow precluded from ordering an apparently violating source to conduct a previously unscheduled performance test "because it would improperly raise the source's chances of being found in noncompliance and thereby 'increase the stringency of the underlying standards.'"<sup>420</sup>

In response to industry's argument against using CEM to enforce stack test NSPS,<sup>421</sup> EPA simply reiterated its view that, because the NSPS and NESHAP emission standards must be met on a continuous basis, consistent with averaging times and except when compliance is excused, more frequent or continuous monitoring has no effect on the standards' stringency.<sup>422</sup> EPA also acknowledged that, in some cases, it had previously stated that CEM "indicator monitoring" data would not be used for direct enforcement purposes absent further rulemaking (e.g., in the preamble to the final kraft pulp mill standards, EPA indicated that CEM data would only be used to assess compliance with good operation and maintenance procedures).<sup>423</sup> However, it believes that the credible evidence rule satisfies this previous commitment.<sup>424</sup> EPA also stated that its previous position was partly motivated by concerns over the cost and accuracy of CEMS, but that both factors had improved considerably since the 1970s.<sup>425</sup> As a result, EPA believes it is now appropriate to use CEM data in compliance certifications and enforcement actions.<sup>426</sup> EPA also contends that sources were obliged to comply continuously with both their general duty to employ

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sulfur dioxide CEMS met their emissions limits approximately 97% of the time. Credible Evidence Revisions, 62 Fed. Reg. at 8325.

<sup>418</sup> *Id.* at 8324.

<sup>419</sup> *See id.*

<sup>420</sup> *Id.* The preamble somewhat sarcastically adds that, "any such increased frequency in reference testing would destroy the delicate balance of frequent noncompliance and infrequent testing that the commenters claim is contemplated by the rules." *Id.*

<sup>421</sup> *See supra* note 353 and accompanying text.

<sup>422</sup> Credible Evidence Revisions, 62 Fed. Reg. 8326. The preamble again used the "radar gun" analogy stating: "To take a simple analogy, allowing the use of radar guns . . . may raise the chance that a speeder will be detected, but this does not alter the legal stringency of a posted speed limit." *Id.*

<sup>423</sup> 43 Fed. Reg. 7571 (1978).

<sup>424</sup> *See* Credible Evidence Revisions, 62 Fed. Reg. at 8326.

<sup>425</sup> *See id.*

<sup>426</sup> *See id.*

good operation and maintenance practices, in accordance with 40 C.F.R. § 60.11(d), and with all specific emission standards.<sup>427</sup>

Finally, EPA disputes industry's reliance on the *Portland Cement* and *Donner Hanna* decisions.<sup>428</sup> It reads *Portland Cement* as simply holding that EPA had failed to adequately demonstrate the reliability of its proposed compliance testing method and not that compliance must be proven by the same reference test used to establish the emission standard.<sup>429</sup> It, likewise, reads *Donner Hanna* as holding that EPA failed to justify its adaptation of Reference Method 9.<sup>430</sup> EPA does not believe that *Donner Hanna* stands for the proposition that the only permissible way to determine compliance with an emissions standard is an identified test method developed through formal rule-making procedures.<sup>431</sup> It contends that such an interpretation is contrary to more recent decisions in *Sierra Club v. Public Service Co.*<sup>432</sup> and *Unitek Environmental Services, Inc. v. Hawaiian Cement*,<sup>433</sup> which allowed use of non-reference test data for compliance determination purposes.<sup>434</sup>

## VII. THE COMPLIANCE ASSURANCE MONITORING (CAM) RULE

EPA Administrator signed the long-awaited CAM Rule on October 3, 1997. It was published in the Federal Register on October 22, 1997, and has an effective date of November 21, 1997.<sup>435</sup> As with the 1993 enhanced monitoring proposal, a full discussion of CAM is beyond the scope of this paper; however, because certain aspects of this rule are relevant to the credible evidence revisions, a short summary is set forth below.

The CAM rule implements portions of Titles VII and V of the 1990 CAAA directing EPA to establish enhanced monitoring and compliance certification requirements for major sources, and directing that operating permits include monitoring, compliance certification, reporting, and record keeping provisions to assure compliance.<sup>436</sup> The

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<sup>427</sup> See *id.*

<sup>428</sup> See *supra* notes 375-95 and accompanying text.

<sup>429</sup> Credible Evidence Revisions, 62 Fed. Reg. at 8321.

<sup>430</sup> See RESPONSE TO COMMENTS, *supra* note 163, at 81-82.

<sup>431</sup> See *id.*

<sup>432</sup> See generally *Sierra Club v. Public Serv. Co.*, 894 F. Supp. 1455 (D. Colo. 1995); see also *supra* notes 63-78 and accompanying text.

<sup>433</sup> *Unitek Env'tl. Servs. v. Hawaiian Cement*, 27 Env'tl. L. Rep. (Env'tl. L. Inst.) 20,483 (D. Haw. 1996), see *supra* notes 91-97.

<sup>434</sup> See RESPONSE TO COMMENTS, *supra* note 163, at 82.

<sup>435</sup> Compliance Assurance Monitoring, 62 Fed. Reg. 54,900 (1997).

<sup>436</sup> *Id.* at 54,901.

CAM rule adds a part 64 to EPA regulations at Title 40, C.F.R., and it amends the part 70 and 71 regulations, which, respectively, govern state and federal operating permit programs.<sup>437</sup>

In broad terms, the CAM rule applies to “pollutant-specific emissions units”<sup>438</sup> at a “major source”<sup>439</sup> which use a “control device”<sup>440</sup> to achieve compliance with an emission limitation or standard and which have “potential precontrol device emissions”<sup>441</sup> that are equal to or greater than one hundred percent of the amount, in tons per year, required for a source to be classified as a major source.<sup>442</sup> It requires owners or operators of such units to: (i) design a monitoring program for the control device to obtain data on certain indicators of the device’s emission control performance,<sup>443</sup> (ii) establish appropriate ranges or designated conditions for the selected indicators such that operation within the ranges provides a reasonable assurance of ongoing compliance with underlying emission standards over the anticipated range of operating conditions (i.e., indicator ranges),<sup>444</sup> and (iii) respond to “exceedances”<sup>445</sup> or “excursions”<sup>446</sup> from the indicator

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<sup>437</sup> *Id.* at 54,940–47.

<sup>438</sup> This is defined as an emissions unit considered separately for each regulated air pollutant. *Id.* at 54,941. An “emissions unit” is “any part of . . . a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under [CAA section 112(b)].” 40 C.F.R. §§ 70.2, 71.2 (1997).

<sup>439</sup> See 40 C.F.R. §§ 70.2, 71.2. In general, §§ 70.2, 71.2 refers to sources with a potential to emit (PTE) 10 tons per year (tpy) of any hazardous air pollutant pursuant to CAA section 112(b) (or more than 25 tpy of any combination of hazardous air pollutants) and sources with a PTE 100 tpy or more of any nonhazardous air pollutant. See *id.*

<sup>440</sup> This means “equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere.” Compliance Assurance Monitoring, 62 Fed. Reg. at 54,940.

<sup>441</sup> This has the same meaning as “potential to emit,” except that emission reductions achieved by the applicable control device are *not* taken into account. See *id.* at 54,941. Potential to emit generally means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. See 40 C.F.R. §§ 70.2, 71.2; Compliance Assurance Monitoring, 62 Fed. Reg. at 54,941.

<sup>442</sup> Compliance Assurance Monitoring, 62 Fed. Reg. at 54,941.

<sup>443</sup> 40 C.F.R. § 64.3(a)(1) (1997); Compliance Assurance Monitoring, 62 Fed. Reg. at 54,942. Performance indicators may include, but are not limited to: “direct or predicted emissions (including visible emissions or opacity), process and control device parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.” 40 C.F.R. § 64.3(a)(1); Compliance Assurance Monitoring, 62 Fed. Reg. at 54,942.

<sup>444</sup> 40 C.F.R. § 64.3(a)(2); Compliance Assurance Monitoring, 62 Fed. Reg. at 54,942.

<sup>445</sup> This means a condition detected by monitoring that indicates that emissions (or opacity) are greater than the applicable standard. 40 C.F.R. § 64.1; Compliance Assurance Monitoring, 62 Fed. Reg. at 54,900.

<sup>446</sup> This means monitoring results that show a departure from an indicator range. 40 C.F.R. § 64.1; Compliance Assurance Monitoring, 62 Fed. Reg. at 54,900.



ranges.<sup>447</sup> In essence, the rule contemplates that major sources will monitor their emissions control devices as opposed to actual emissions.

The CAM rule specifies performance criteria which sources must follow in designing their monitoring programs,<sup>448</sup> and it sets out requirements for operation of approved monitoring programs.<sup>449</sup> Under certain conditions, it also allows EPA or state permitting authorities to require sources to develop and implement a quality improvement plan (QIP).<sup>450</sup> The rule contains various reporting and record keeping requirements,<sup>451</sup> and it is implemented through the part 70 and 71 operating permit program.<sup>452</sup>

The CAM rule provides for an extended implementation schedule.<sup>453</sup> For "small" pollutant-specific emission units (i.e., units which, after consideration of emissions controls, do not have the potential to emit the applicable pollutant at or above the major source threshold), implementation is not required until the next permit renewal.<sup>454</sup> "Large" pollutant-specific emission units (i.e., units which, after controls, still have the potential to emit the applicable pollutant at or above the major source threshold) must generally comply in advance of permit renewal only if the initial operating permit has not been filed or determined by the permitting authority to be complete prior to April 20, 1998.<sup>455</sup>

The CAM rule's preamble discusses the relationship of CAM to the credible evidence rule.<sup>456</sup> It notes that, in general, EPA expects that sources subject to the CAM rule will be in compliance with all appli-

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<sup>447</sup> 40 C.F.R. § 64.7(d); Compliance Assurance Monitoring, 62 Fed. Reg. at 54,945.

<sup>448</sup> See 40 C.F.R. § 64.3(b); Compliance Assurance Monitoring, 62 Fed. Reg. at 54,942.

<sup>449</sup> See 40 C.F.R. § 64.7; Compliance Assurance Monitoring, 62 Fed. Reg. at 54,945.

<sup>450</sup> See 40 C.F.R. § 64.8; Compliance Assurance Monitoring, 62 Fed. Reg. at 54,945. A QIP is required upon a determination that the source has not used acceptable procedures in response to an excursion or exceedance. 40 C.F.R. § 64.8; Compliance Assurance Monitoring, 62 Fed. Reg. at 54,945.

<sup>451</sup> See 40 C.F.R. § 64.9; Compliance Assurance Monitoring, 62 Fed. Reg. at 54,946.

<sup>452</sup> 40 C.F.R. §§ 64.4, 64.6; Compliance Assurance Monitoring, 62 Fed. Reg. at 54,943-45.

<sup>453</sup> See Compliance Assurance Monitoring, 62 Fed. Reg. at 54,902, 54,927.

<sup>454</sup> See 40 C.F.R. § 64.5; Compliance Assurance Monitoring, 62 Fed. Reg. at 54,944.

<sup>455</sup> See 40 C.F.R. § 64.5; Compliance Assurance Monitoring, 62 Fed. Reg. at 54,944. The relationship between CAM rule's applicability provisions and implementation schedule is somewhat confusing. As previously noted, the part 64 rule applies to pollutant specific emissions units which, *inter alia*, have potential pre-control device emissions (i.e., potential to emit before controls) equal to or greater than 100% of the amount required for the source to be classified as a major source. For purposes of the implementation schedule, however, the rule designates a subset of these units as "large" if their potential to emit after controls still exceeds the major source threshold. See Compliance Assurance Monitoring, 62 Fed. Reg. at 54,927.

<sup>456</sup> See Compliance Assurance Monitoring, 62 Fed. Reg. at 54,906-07.

cable emissions limits if they conform to the part 64 requirements.<sup>457</sup> Also, EPA anticipates that there will be relatively limited information available to override that provided through monitoring under the CAM rule.<sup>458</sup> Even if a source is in full compliance with the CAM rule, however, EPA still reserves the right to take enforcement investigations "when appropriate under the circumstances."<sup>459</sup>

The preamble reiterates EPA's previously stated position that it was appropriate to proceed with the credible evidence rulemaking separately from the CAM rule.<sup>460</sup> EPA believes there was sufficient opportunity for all interested parties to comment on any perceived relationship between the two rules before the credible evidence rule was finalized in February 1997.<sup>461</sup> It also notes that the credible evidence and CAM rules have a different scope.<sup>462</sup> The credible evidence rule affects all sources covered by parts 51, 52, 60, and 61, not just those covered by part 64.<sup>463</sup> EPA also notes that the two rules have different statutory bases—the credible evidence rule was based on CAA section 113(a) whereas the CAM rule was based primarily on section 114(a)(3).<sup>464</sup>

The CAM preamble points out that despite these differences, the two rules are complementary.<sup>465</sup> In this regard, EPA states:

Most importantly, the [credible evidence] rulemaking affects the potential consequences of identifying deviations, exceedances or excursions in a compliance certification based on data, such as part 64 data, that are from sources other than the compliance or reference test method. *The [credible evidence] revisions clarify the authority to rely on these data to prove that a source is in compliance or that a violation has occurred.*<sup>466</sup>

The preamble goes on to state that EPA intends to apply its current enforcement policies in situations where a review of CAM data suggests that a source has violated underlying emissions limits.<sup>467</sup> EPA

<sup>457</sup> See Compliance Assurance Monitoring, 62 Fed. Reg. at 54,906.

<sup>458</sup> See *id.*

<sup>459</sup> See *id.* Such circumstances include the existence of information which "indicates there are conditions that may threaten or result in harm to public health or the environment, indicates a pattern of noncompliance, indicates serious misconduct, or presents other circumstances warranting enforcement." *Id.*

<sup>460</sup> See *id.*

<sup>461</sup> See *id.*

<sup>462</sup> See Compliance Assurance Monitoring, 62 Fed. Reg. at 54,906-07.

<sup>463</sup> See Compliance Assurance Monitoring, 62 Fed. Reg. at 54,907.

<sup>464</sup> See *id.*

<sup>465</sup> See *id.*

<sup>466</sup> *Id.*

<sup>467</sup> See *id.*

rejected commenters suggestions that compliance with indicator ranges under part 64 should serve as a shield to enforcement actions.<sup>468</sup> EPA also rejected suggestions that there be an enforcement shield where the source owner or operator identified excursions or exceedances from the indicator ranges and took prompt corrective action.<sup>469</sup>

Finally, EPA used the CAM preamble to restate its view that the use of CAM data as credible evidence in an enforcement proceeding would not increase the stringency of underlying emissions standards.<sup>470</sup> According to EPA, the CAM data could only be used if, as stated in the credible evidence rule, it is relevant to whether the source would have been in compliance with the applicable standards if the appropriate performance test had been performed.<sup>471</sup>

### VIII. CURRENT COURT CHALLENGES

As of October 1997, the credible evidence rule was involved in litigation before the United States Court of Appeals for the District of Columbia.<sup>472</sup> Industry filed almost 100 petitions for review of the rule before the D.C. Circuit pursuant to CAA section 307(b)(1).<sup>473</sup> These petitions challenged both the credible evidence rule itself as well as numerous individual emissions standards which industry contends are affected by the rule.<sup>474</sup> These challenges were originally consolidated under the lead case, *Clean Air Implementation Project v. EPA*.<sup>475</sup>

In a motion filed on May 28, 1997, the Government moved to dismiss those petitions challenging existing standards.<sup>476</sup> EPA and Department of Justice (DOJ) essentially argued that industry's objections went to the validity of the credible evidence rule itself and that there were no valid "after-arising" grounds on which to now challenge the emissions standards under CAA section 307(b)(1).<sup>477</sup> The

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<sup>468</sup> Compliance Assurance Monitoring, 62 Fed. Reg. at 54,907.

<sup>469</sup> *See id.*

<sup>470</sup> *See id.*

<sup>471</sup> *See id.*

<sup>472</sup> *See Clean Air Implementation Project v. EPA*, No. 97-1117 (D.C. Cir. filed Mar. 4, 1997).

<sup>473</sup> *See id.*; *see also* 42 U.S.C. § 7607(b)(1) (1994).

<sup>474</sup> *See Clean Air Implementation Project*, No. 97-1117.

<sup>475</sup> *See id.*

<sup>476</sup> *See generally* U.S. EPA's Motion to Dismiss Certain Petitions for Lack of Jurisdiction, *Clean Air Implementation Project*, No. 97-1117.

<sup>477</sup> *See id.* at 2.

industry petitioners vigorously opposed this motion.<sup>478</sup> The court temporarily resolved this issue in an Order entered on August 26, 1997, which severed those petitions challenging individual standards from *Clean Air Implementation Project v. EPA*.<sup>479</sup> The Order directed that the severed cases be consolidated under the lead case of *Appalachian Power Co v. EPA* and that they be held in abeyance pending further order of the court.<sup>480</sup> Briefs were due in the *Clean Air Implementation Project* case beginning on November 12, 1997, and oral argument was scheduled for March 17, 1998.<sup>481</sup> At the earliest, the court will not issue its decision until the second quarter of 1998.

### CONCLUSION

Even if the United States Court of Appeals for the District of Columbia eventually upholds the credible evidence rule, which is by no means certain given the many contentious issues that have been raised, its ultimate impact on CAA enforcement is problematic. Under the rule, any proffered non-reference method evidence must be relevant to whether a source would have been in compliance with applicable requirements if the specified performance test had been performed.<sup>482</sup> This threshold requirement will doubtless be the source of intense litigation for many years to come as the new rule is used in individual cases. In each case, one can anticipate that the opponent to the introduction of "any credible evidence" will argue that it is no consistent with performance test results and that, as applied, it changes underlying emissions standards. Industry, in particular, has an obvious incentive to dispute any evidentiary interpretation that could result in a finding of noncompliance and potentially force it to install expensive new capital equipment before its existing equipment is fully amortized. It will, therefore, vigorously oppose efforts by state and EPA regulators, as well as citizen-suit plaintiffs, to introduce non-reference method data in enforcement

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<sup>478</sup> See, e.g., Opposition to Motion, *supra* note 327; Petitioner American Forest & Paper Association's Response to Respondent's Motion to Dismiss Certain Petitions, *Clean Air Implementation Project*, No. 97-1117 (June 25, 1997, D.C. Cir.); Society of the Plastic Industry's Opposition to the U.S. EPA's Motion to Dismiss, *Clean Air Implementation Project*, No. 97-1117 (June 25, 1997, D.C. Cir.).

<sup>479</sup> See *Clean Air Implementation Project*, order No. 97-1117 (D.C. Cir. filed Aug. 26, 1997).

<sup>480</sup> See *id.* at 2.

<sup>481</sup> See *Clean Air Implementation Project*, order No. 97-1117 (D.C. Cir. filed Sept. 25, 1997).

<sup>482</sup> Credible Evidence Revisions, 62 Fed. Reg. 8314, 8316 (1997).

proceedings. The proof and rebuttal of these claims will inevitably be a costly and time-consuming process, one that is perhaps irreconcilably at odds with EPA's original goal that the new rule simplify CAA enforcement.